SANGYAHARAN SHODH

(A Bi annual Peer Reviewed International Journal)

Including supplementary issue Souvenir AAIMCON-2016

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An Official Journal of

BHARATIYA SANGYAHARAK ASSOCIATION

(Association of Anesthesiologists of Indian Medicine)

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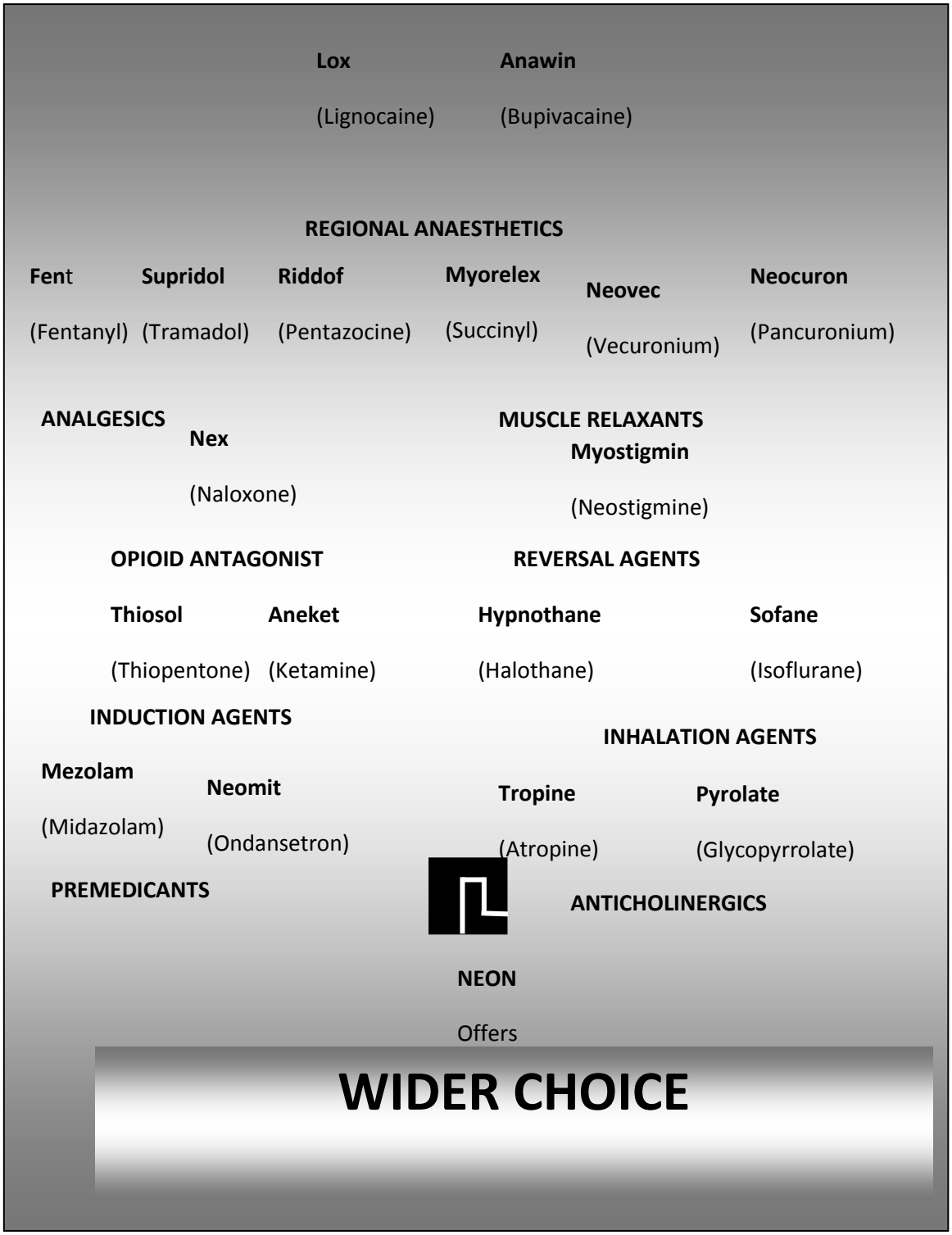
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Editorial

I am fortunate to be a part of 18th National and 4th International Conference as Chief Editor of this glamorous Souvenir to be in your hand at the Inaugural function on 9th April 2016 . Our Association has completed 20 year gracefully and successfully. We have made several milestones through the strength of our Association. We continuously Organized 18 National and 4 International Conference at different corner of the country. Our journal- the mouthpiece of the Association also fulfilled its responsibility very effectively. As Chief Editor I am proud that Journal was published regularly and continuously. It also improved its gate up with academic materials. The Journal was achieved status of International Peer Reviewed Journal with its ISSN no. It drew attention of world academic by it`s Research Publications and Social activities. In this present issue we covered Research Articles, Messages of our well-wishers- Patrons -higher authorities and abstracts. Apart from this we have included the brief resume of Faculties of Faculty of Ayurveda, I.M.S., B.H.U. since its inception till date. Thus this issue will be an special issue for every Ayurvedist because there are several souls and personalities which work and memory will inspire the whole Ayurvedic world to work for development of Ayurved.

A last but not the least I congratulate in advance to all the A.A.I.M. Members and members of Organizing Committee for successful organization of 18th National and 4th International Conference.

Jai Hind Jai Ayurved Jai Sangyaharan

Devendra Nath Pande, Chief Editor, Professor & Founder Head, Deptt. Of Sangyaharan, I.M.S., B.H.U., Varanasi.

Pain Clinic In Ayurveda: Need of The Hour

*Dr. Gaurav phull ** Dr. Rekha phull

ABSTRACT:- Pain is the most common symptom which patient complains to a clinician. Therefore, it is one of the biggest challenge for a clinician to have an effective solution to this problem. Pain has been described in Ayurveda as RUJA/ SHOOL/ VEDNA which is commonly due to vitiation of VATA Dosha. Ayurveda suggests a different approach to pain relief. It begins by viewing pain as mind body experience that's highly subjective. On contrary to a general perception that Ayurvedic treatment is not that effective like modern medicines and techniques, some of the therapies and principles of Ayurveda are really effective in alleviating pain, especially in chronic cases where the patients are fed up of pain killers and it`s side effects .

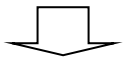
INTRODUCTION: - Pain can be defined as an unpleasant sensory and emotional experience associated with actual or potential tissue damage ,or described in terms of such damage. Pain perception varies from person to person and from time to time. It is subjective one and is difficult to assess and quantify. Pain is what patient says "it is". Patient's self report of pain is the single most reliable indicator of pain. It can be categorised into different types:- physical or mental, acute or chronic, intermittent or persistent and mild or severe.

Pain pathway:- pain receptors in skin

Activation of neurotransmitters of pain like substance P or peptides

Sensory nerves

Posterior horn of spinal cord



Spinothalamic tract

Thalamus

Pain perception in Cerebrum.

Types of pain:-

1. Depending on duration- acute or chronic.
2. Depending upon aetiology- somatic, visceral, bone pain , neuropathic.
3. Depending upon intensity – mild, moderate and severe.
4. According to site- local or diffuse.
5. According to nature- intermittent or persistent.

According to Ayurveda pain has been described by different names as shool, vedana, ruja, which are due to vitiation of vata dosha. Vata is the main factor for generating and spreading the pain.

*** Clinical Registrar, Sangyaharan, CBPACS, New Delhi.**
****lecturer Kaya Chikitsa, MLRA College, Charkhi Dadri.**

Sarveshu eteshu shooleshu prayen pawan prabhu .. ..Madhav Nidan 26/1.

MANAGEMENT OF PAIN ACCORDING TO AYURVEDA: 1. Pharmacological 2. Non pharmacological.

Pharmacological:-Oral drugs (vatanashak dravya), lepa ,panchkarma procedures like snehan, swedan ,basti , nasya.

Drugs for pain relief: vedanasthapan dravya mentioned by Acharya Charak.(sutra sthan 4).

Some other useful drugs for relief in different types of pain are: For headache – jatamansi, godanti, brahmi, guduchi etc.

For intestinal colic/ gases – hingu,lavan,yavani etc.

For arthritis – nirgundi, shallaki, dashmool etc.

For uterine pain – ashok, daruharidra ,dashmool etc.

Snehan: - In the Ayurvedic tradition, regular oil massage, or snehan , is revered as a highly effective form of therapy for all sorts of ailments. Massage helps in reduce pain because it tames vata, allays joint and muscle stiffness, increases circulation, mobilizes toxins, and relaxes the body. The procedure includes application of medicated oil which is selected according to type of pain. Internal oleation is one of the best way to control vata dosha, 2-3 tsf of ghee everyday will serve the purpose.

Snehan can be done by sneha dhara, abhyanga, avagaha, kati basti(for lumbar pains), janu basti(for knee pains), hrid basti(for chest pains), netra basti(for ocular pains).etc.

Swedan (sudation)- can be done by avagaha sweda, pizichil, nadi swedan, panda sweda etc. Swedan is done in cases of sprain, back ache, muscular injury as sports injury.

Basti (medicated enema)- In some cases of abdominal pain like renal colic or accumulation of gases, basti treatment works wonders. Lumbar pain can be well managed by various types of basti therapy.e.g:- Eranda basti, vaitaran basti, pippalyadi anuvasana basti etc.

Lepa :- It literally means application of paste of herbs on affected area and leave it to dry. Usually applied in cases of swelling, injury, sprain etc.

Non pharmacological :- lifestyle modification ,Agnikarma , Jalauka, Viddha karma, Alabu , Yogasana and Marma therapy.

Lifestyle's role in pain management :- The lifestyle components of Ayurveda such as positive relationships, nurturing emotions, massage, balanced activity, rest and diet – are some of the means to rebalance, strengthen, and purify the mind/body variables that lower our pain sensitivity. Love and human touch are other potent pain relievers. Studies have shown that a 20-second hug can relieve pain and stress by acting on nerve cells to release pain- relieving brain chemicals such as oxytocin and reduce the release of stress hormone– cortisol.

AGNI KARMA :- It is very effective in diminishing pain and decreasing muscle spasm. It is particularly very useful in decreasing pain in musculoskeletal disorders like Tennis elbow, Golfer's elbow, Plantar fasciitis, Calcaneal spur , Frozen shoulder etc. This has been clinically proven in various studies. Reason for effectiveness of Agni karma are :-

Reduces pain and inflammation due to local increase in temperature and therefore influx of fresh blood which helps in flushing out the inflammatory mediators.

Reduction in muscle spasm, pain and soft tissue oedema is thought to occur by its counter irritant effect on nerve conduction and a reduction in muscle contractility.

Fibres carrying temperature , touch and pressure are thicker in comparison to pain fibres , therefore impulse travels faster in them which blocks the pain sensation at substantia gelatinosa according to Melzack and Wall's Gate Theory.

Agnikarma probably obtunds the nerve endings at the local dermatomes , thus decreasing pain sensation.

JALAUKA :-This has been mentioned as one of the ways of blood letting and is rated as the best one. . Leeches are usually used where the cause of pain lies in blood tissue. The moment the impure blood is sucked out the pain disappears It is used as method of choice in conditions where pitta dosha is vitiated, Thus very effective in reducing pain in inflammatory conditions like cellulitis, hematoma, abscess ,varicose veins ,diabetic foot (angiopathy) etc.

VIDDHA KARMA:- This is a miniature of blood letting , a very small puncture is done with help of a needle. The knowledge of vital points and symptoms related points is essential. This procedure serves many purposes but usually done in headache, eyeache, tonsillitis, nasal blockage, pain related to nerve defects, joint pains and much more. This treatment gives miraculous results in fraction of seconds. .

ALABU(CUPPING):-It is method of blood letting used in cases of vitiated kapha dosha. With Recent advancements readymade glass or plastic cups have been developed for this procedure. These cups work on the same mechanism of vacuum creation inside the cup, which results in influx of fresh blood to the affected site. This helps in flushing out the inflammatory mediators and other metabolites, thus helps in quick healing , reducing inflammation and alleviating pain. Cupping is particularly very helpful in releasing muscle spasm of different body parts , sprain, frozen shoulder , joint stiffness after prolonged bed rest etc.

MARMA THERAPY: - Marma is the sthan(part) where prana or vital energy resides. Marma therapy is the art of touching, stimulating an individual in exactly the right place of marma at a critical moment in time, for the purpose of healing. This therapy is aimed at stimulating specific organs and/or systems while releasing blocked energy and promoting flexibility. In this therapy, certain Ayurvedic oils are used according to patient need and application of mild heat on specific areas to release tension.

GENTLE ASANA/YOGA:- Pain can discourage us from stretching and moving the way we normally do, but restricting your movement will only compound the problem. Toxins accumulate where there is stagnation and congestion in the body, and this causes pain. Contraction and relaxing our muscles with gentle asanas relieves the stagnation by mobilising blood, lymph and synovial fluid. Even 15 minutes of stretching every morning or evening will make a world of difference.

CONCLUSION:- It is clearly evident from reviewing our texts and clinical results, that Ayurveda has answer to tackle the various painful conditions. The point to consider is judicial and logical use of Ayurvedic therapies and drugs. It's very important to accept and understand the limitation of our system, as some cases of acute pain e.g post traumatic pains, accidental cases or pain due to tumours or colicky pains might not be cured by Ayurvedic methods. Keeping this in mind, the pain management clinics can be run at our institutes/ hospitals effectively. This shall make us more able to serve the society and help in increasing the popularity of Ayurveda. We can certainly provide An Effective, Potent and Economical alternative solution.

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SRB's manual of surgery, Sushruta samhita chikitsa sthan.
http://www.chopra.com/ccl/ayurvedas-approach-to-pain-management#sthash.
http://ayurveda-foryou.com, Charak samhita sutra sthan 4.[i]

Concept of Agni and its clinical Implications in the Management of Psychosomatic Disorders

Dr. Ramesh Chandra* *Dr. R.K.Jaiswal ** *Dr. K. K. Pandey*

Abstract: In Modern scenario of urbanization and progress have brought tremendous improvement in health care and general standards of living and the pressure of sustaining these standards does take a toll on us. As we struggle to cope the pressure of work and survival in this competitive era we forgot to take consideration or compromise on diet, exercise , proper sleep , rest and relaxation this type of daily routine in our life creates stress and stress induced psychosomatic disorders like Irritable bowel syndrome ,Hypertension ,Asthma , Migraine , Psoriasis , peptic ulcer disease and so many more.As we know the most of diseases in present scenario is caused due to our poor eating habits and sedentary life style and with target set or planned work module with very tough and schedule terminate Gastrointestinal diseases ,Cardiovascular disease ,neuropathies , endocrine disorders and many more. As described in Ayurvedic text all diseases origin from Mandagni.

Aims& Objectives :1.Understanding of concept of agni and its awareness in clinical practices
2. psychosomatic disorders and prevention through implementation of therapeutics of agni

Key words:- Agni , Stress , psychosomatic diseases, Nidan parivarzan

Introduction: Ayurveda is perhaps the only medical science of life which gives equal stress to preventive aspect of heath along with curative one. Among various Treatment modalities in ayuveda “Nidan parivarzan” concept has its great importance.(Su.Sha.Ut 1/25) [1].

The term of ***Agni ,*** in common language, means fire. However, in the context of the functioning of a living organism, which maintains its integrity and performs its vital activities, by converting in ***Pakadi-Karmas*** or bio-physical and bio- chemical processes, the foods consumed in various ways – licked, masticated, drunk, etc. not only into its various structural and functional constituents but also to provide the ***Shakti*** or energy necessary for processing with its innumerable vital activities, this term does not actually mean fire. In these sequences, the term ***Agni*** comprehends various factors which participate in and direct the course of digestion and metabolism in living organism.[2]

Synonyms of agni :- In *shabdakalpa druma*, 61 synonyms of *Agni* have been compiled. These synonyms help in explaining the nature and functions of the *Agni*, e.g., Vaishvanara, Sarva *Paka*

Tanoonpata, Amivachatana, Damunasa, Shuchi, Vishwambhar, Rudra etc. (*Shabdakalpadrum*).[3]
Types of Agnis :*Agni* is innumerable because of its presence in each and every *dhatu paramanu* (cell) of the body. But, enumeration of the number of *Agnis* varies in various classical Ayurvedic texts, as shown below:

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Charaka has mentioned about 13 *Agnis*. *Jatharagni* – 1, *Bhutagni* – 5, *Dhatvagni* – 7 (Ch.Chi.15/38).[4]
According to Acharya Sushruta, five types of *Agnis* are illustrated, viz. *Pachakagni*, *Ranjakagni*, *Alochakagni*, *Sadhakagni* and *Bhrajakagni*. However, there is an indirect reference of five *Bhutagnis*underlying in the brief description made to the transformation of food stuff. (Sh.Su.21/10.)[5]
Vagbhata has described different types *Agni*, viz. – *Bhutagnis* – 5,– *Dhatvagnis* – 7, –*Dhoshagni* – 3 and– *Malagni* – 3.
Sharangadhara has recognized five *pittas* only (*Pachak, Bhrajak, Ranjak, Alochaka* and *Sadhak*) (Sha.Sa.Pu.Kh.-5/32).[6]
Bhavamishra has followed Acharya Charaka and Vagbhata (Bh.Pu.Kh.-3/169,180).[7]
Agni has been divided into 13 types according to the function and site of action. These are:
Jatharagni – one *Agni* present in the stomach and duodenum.
Bhutagni – five *Agni* from five basic elements.
Dhatwagni – seven *Agni* present, one in each of the seven *dhatus*.
Accordingly, they are classified into three groups, namely *Jatharagni*, *Bhutagni* and *Dhatvagni*.

Jatharagni (***Jathar*** means Gastrium):It converts the gross food particles into smaller particles which are then able to be absorbed.ie-Gastrointestinal tract.
The ***Ayu*** (lifespan), ***Varna*** (complexion), ***Bal*** (vitality), ***Swasthya*** (goodhealth), ***Utsaha*** (enthusias m ***), Sharir Vridhi, Prabha*** (glow), ***Oja***(vital essence), ***Tej*** (lusture), ***Agnis*** and the ***Pran*** (life breaths) are derived from the ***Agni*** in the body.[8]

When the ***Agni*** is extinguished man dies, when a man is induced with it adequately, he lives long in good health, when it is de-arranged, he begins to ail. Therefore the function of ***Agni*** is said to be the main stay of life. The food which is considered the nourishing factor of the ***Sharir, Dhatu, Ojas, Bal, Varna*** and other things, that very food too, is dependent for its nutrient action on the ***jatharagni*** as from the undigested food, the ***sharir dhatu*** cannot be formed.[9]

Bhutagni: There are five kinds of ***Agni*** innate in each of the ***maha-bhuta*** of the body – ***prithvi, apya*** , ***agneya, vayava*** and ***nabhasa*** , every ***bhutagni***digests its own corresponding component mahabhuta, in the ingested food which is a compound of the ***mahabhutas*** . Just as a quality in the substances nourishes individually its corresponding quality in the body as for example, the ***mahabhuta*** of ***prithvi*** in the body is nourished by the ***mahabhutas*** nourish their corresponding qualities, thus making for complete nourishment.[10]

Dhatwagni: The body substaining ***Dhatu*** , which are seven, undergo combustion by their ***Dhatwagni*** and each of them gets transformed into products namely ***Prasad*** (vital substances) and ***Kitta*** (excretory substances).[11]

The very causative factor of ***amavata*** , the ama is resultant of hypo functioning of ***Agni*** . Accordingly, as to the ***Dosha or Doshas*** which may influence ***Jatharagni,*** there are three types of ***Agni disorders*** .
(i) Visamagni (ii) Tikshnagni (iii) Mandagini

[I] Visamagni: It is caused by vitiation of ***Vata*** and results in ***Vishtabdha-Jirna*** . It manifests with ***Shoola*** (pain in abdomen), ***adhaman*** (digestion of abdomen), ***todabheda*** (pricking like pain), apravriti of ***adhovayu*** and ***malas*** (non movement of flatus and

excreta), ***stabdhata*** (stiffness),***murchha*** (fainting) and ***angamarda*** etc.symptoms of ***vata (vroddhi***).[12]

[II] Tikshnagni : It is caused by vitiation of ***pitta*** and results in ***vidag-dha- jirna*** . It manifests with ***bhrama*** (giddiness), ***trishna*** (thirst), ***Murchha*** and ***osha***(heating), ***chosha*** (scorching), ***Sweda*** (perspiration), ***amlodgara*** (belching), ***daha*** (burning sensation) and other symptoms of ***pitta.*****[13]**

[III] Mandagini: It is caused by vitiation of ***kapha*** which is the main cause in formation of ***Ama*** and results in ***amajirna*** . It produces ***gaurava*** (heaviness of abdomen / or of whole body), ***utklesh*** (nausea), ***shotha*** on ***kapola*** (cheeks) and ***akshikuta*** (eye orbit) and ***avidagdha udagara*** (belching), occurring soon after and according to meals [14]

This was brief introduction about agni , its types and its importance in the field of medical of Ayurvedic Science now the introduction psychosomatic disorders in brief.

Psychosomatic disorders: The word "psychosomatics" is made up of two greek words *Psyche* ,which means "mind"and *soma* which means "body". Psychosomatic disorders are illness that manifest as physical symptoms but originate from mental or emotional rather than physiological causes. it also includes the diseases where no organic cause could be found out which is related to anxiety ,stress and depression.It is very important to understand the dynamics of psychosomatic disorders. Emotions are produced by our thoughts and they can also affect our body. The connection between mind and body is due to the neurotransmitters .Emotions tends to alter the levels of these neurotransmitters and thus a physical disease alter the functioning of other part of body. Psychosomatic disorders may affect almost any part of the body, through they are usually found in the system not under voluntary control. Some physical disease are believed to have a mental component drived from stress and strains of everyday living.

Etiological factor or Risk factors:work load –mostly females ,private sector person ,ladies have house hold responsibilities with there jobs ,the corporate personalities have time crisis for mental relaxation.

1. Introverted nature, cut of the person from social interaction ,sometimes he/she feels alone
2. Egoistic attitude is one of the cause of psychosomatic disorders
3. Family conflicts accelerate the anxiety level.
4. Pragya apradh
5. Pessimistic attitude towards environment etc. are some risk for psychosomatic disorders.

How can the mind affect physical diseases (Psycho –Soma Relationship)
It is well known that the mind can cause physical symptoms. For example, when we are afraid or anxious we may develop: A fast heart rate ,A thumping heart (palpitations) ,Feeling sick (nauseated) ,Shaking (tremor) ,Sweating ,Dry mouth ,Chest pain ,Headaches ,A knot in the stomach ,Fast breathing.Classification of psychosomatic illness:- psychosomatic illness can be classified I three genral forms The first form includes those who experience both a mental and medical one ,these illness complicate the symptoms and management of each other.
The second form includes those who experiences a psychiatrics issue that is a direct result of medical illness e.g. depression ,anxiety secondary to cancer.
The third form of psychosomatic illness is "somatoform". somatoforms disorders are psychiatric ones that are displaced through physical issue these are follows:

- **Nervous system :** headache, twitchings, neurovegetative disorders (which may include a lot of other following disorders)

- **Digestive system:** gastric ulcer (with Helicobacter Pylori, hyperacidity... then stress may induce ulcers), colopathy (constipation or diarrhoea , IBS **)**
- **Cancers**: In fact we cannot say that the cancer is a psychosomatic disorder, there are genetics pathology, surroundings factors, and psychosomatic factors:
- **Rheumatism and osteo-muscles disorders:** arthritis, lumbago, LBA
- **Cardiovascular system:** arterial hypertension, throbbing of heart, infarct**...**
- **Immunologic disorders:** allergy: asthma... connectivitis**.**
- **Endocrine diseases:** hyperthyroidis**m** (both autoimmune and endocrine disorder**),** diabetes**.**
- **Lung's diseases:** cough, dyspnea,
- **Nutritive function disorders:** anorexia, bulimia
- **Sexology:** "ejaculatio ante portas", impotence, anaphrodisy(loss of pleasure): sex is a high place of somatization.
- **Dermatology:** psoriasis, eczema.
- **Child psychosomatic troubles-** Chronic Abdominal Pain, Enuresis, appetite troubles. in which the relation child -mother is so important.

Complications of psychosomatic illness:
Psychosomatic illness , specifically a somatoform disorders cases increases risk of:Difficulty functioning effectively in everyday life ,such as in school, at work and in relationships.
Disability
Lower quality life
Major(Severe) depression
Suicidal thoughts and actions
Brief Introduction of psychosomatic disorders including Definition, Risk factors , Mind –body relationship in psychosomatic disease including its complications.
Material and methods: Various Ayurvedic literature ,modern literature, text books of Ayurveda and Modern , articles, and journals of Concern topic "Concept of Agni and its clinical Implications in the Management of Psychosomatic Disorders" are studied for this review work.
Discussion: Concept behind Implication of agni in Prevention and treatment of Disease-
The concept behind concept of agni in physical diseases , physiological and psychosomatic disease too as text of ayurveda all diseases are due to mandagni and Samgani is true state of health so maintain health Samagni is necessity at cell tissue organ and system level . So full conceptual and therapeutic knowledge of agni is must for a Indian Medicine Practitioners or AYUSH doctors.
As described by Acharya susurut the basic and most important treatment policy to treat a disease is "Nidan Parivarjana" ie the disease occurs due to disturbed physiology of body and improper metabolism of body along with nutrition of body to excretion of metabolitis all governed by Agni so if we know all disease are due Altered stage of Agni mostly "Mandagni" so we can easily Prevent a disease by prevailing Mandagni as Nidan parivarjana.

Diseases	**Nidan of Diseases**
Jwar (Fever)	Amasaya samuth **(Mandagni)** , Dosic imbalance, Trauma(Abhighat), ,disturbed mental function (Abhisanga), Abhichar (Environmental factor of negative energy), Abhisaap(disobey of respective)[15]
Rakta-pitta	**Improper diet habits (Virudha ahara)** , Pitta prakopak ahar (Diet caused to produce enhance Agni in Improper way)[16]
Gulma	**Improper diet habits (Virudha ahara)** , Dosa prakopak aahar respectively

	Vat ,Pita ,Kapha , Mandagni can worse the condition in Gulma disease[17]
Premeha	Madhur Aahar ati sevana (**improper digestion ie Mandagni**) , sedentary life style , heavy diet(diet enhances kapha)[18]
Kustha	Tridosa prakopa + Vikrat Rasa[Twak] (**indigestion ie Mandagni)** Rakta ,Mansa,Lasika and **Virudha Aahar (Improper diet habits)[19]**
Rajyachama	Sahas (Excessive heavy work) , Sandharana(improper daily regimne), Chaya (Un- nourished diet) , **Vismasan (virudhaahar ie Mandagni)[20]**
Unmad	Manovaha srotodusti , disturved asthva bhava (Mana ,buddi ,chetna ,ghyan,Smarana, Bhakti ,Sheel ,Chesta, Aachar) ,**Improper diet scheedule**.[21]
Apasmara	**Improper diet ,improper diet schedule** , disturbed mental function (Mansik bhava ,Raj and Tama dusit mana)[22]
Urukshat	Excessive hard and laborious work , **improper diet**(excessive ruksha,alpa, primitaahar)[23]
Udar-Roga	**Mandagni** ,**Improper dietry habbits** ,pap karma and Associated disease like pliha ,Arsa,Grahani dosa.[24]
Grihani-Roga	**Mandagni ,Improper dietry habbits[25]**
Arsa	**Mandagni ,Improper dietry habbits[26]**
Pandu&Kamla Roga	**Improper dietry habits** ,Dosik prakopa ,Mradabakshan, **Pittaprakopak aahar[27]**
Hikka,swaas ,Kasa Roga	**Improper dietry habits**(Vidhahi guru visthambi ruksha abhishyand bhojan), dust ,cold season (sheetasanpan) [28]
Atisar	**Improper life style and dietry habits,** Krimi nidan ,Jal krida .[29]
Kshardi	Amasaya samuth dosa , vyayam ,teekshana aushad , soka ,**Ajirana (indigestion)** , bhaya ,Anorexia .**Aamdosa prakopa** etc[30]
Agirana	**Improper life style and dietry habits tends to Mandagni**(Atyambupan ,Vismasana ,Sandharana , Swapanaviparyay)[31]
Alsak,Visuchika, Vilambika	**From agirana** (Aamagirana-visuchika ,Visthavdhagirana-Aalsak,Vidhadagirana-Vilamvika)[32]
Krimi-Roga (Abhayantara)	**Agiranabhoji ,** Madhuramalnitya ,Drivyapriya , Pistgunbhokta ,Vyayamvarji, Divasayan , **Improper diet Schedule (Virudha-Ahar)** [33]

Importance of Agni in heath (swath sarira);

Diet (solid,liquid,semisolid,or in any other form) 1. Aaharrasa Prasad bhag rasa

2.Aahar Mala bhag:This represent how agni have role in production of new life from a " Pathya Aahar" [A complete Nutritional valued diet according to seasonal pattern and give Satisfaction to Mana and Atma also good for Srotas] in solid , liquid or Semisolid form gets convert in Aahar Prasad rasa bhag this convert to rakta ,Rakta convert in Mansa, mansa convert in meda ,meda convert Asthi ,asthi convert to Majja and majja to Sukra.and sukra have innate power of produsing a Gharbh. So if one take Patya Aahar according Ritucharya and According to diseases too as described in Ayurvedic texts he/she will be healty and capable of getting offspring. (Cha. Chi. 15/16-17)[34]The root of body is Dosa , Dhatu , and Mala these three make a body and maintains health and diseased state and metabolism of all three maintained by Agni. (Su.Sha.Sutra.15/3)[35].. These seven dhatus make a body and maintain it. If dhatu vitiated disease of dhatu occurs known as "Dhatupradosaj vikar" . In the conversion of dhatu from Rasa to sukra dhatu Dhatuagi play a major role. So if Dhatuagni is not in equilibrium state dhatu will not Dharan the body and make it weak and diseased. As described by Aacharya susurut the equilibrium state of Dosh ,Dhatu and Mala maintains the Health. So it is proved that Agni in eqilibria (Samagni) is the need of body. (Su.Sha.Sutra.15/48)[36] So it is certify that agni has great importance in maitinace of health and diseased state. On can reduced prevalence of psychosomatic disease and also all other diseases by Nidan-Parivarjan. Society can be helped in Achieving the goal of health for All.

Conclussion:*Agni* may be correlated with digestive & metabolic fire in the body .It is the substance secreted in our body, which is directly responsible for chemical changes in the body. It consist digestive (***pak***) enzymes and different kinds of hormones, and co-enzymes activities etc. which participate in these digestive & metabolic functions. It is a logical conclusion that ***Ama*** is produced due to hypo-functioning of Agni. At any level of the three ***Pakas*** (digestion and metabolism i.e. ***Madhur, Amla & Katu avastha paka & vipaka***) due to hypo-functioning of the agni concerned unwanted chemical substances are produced known as ***Ama***. Hypo-functioning of any Agni especially of ***Jatharagni*** is likely to affect the function of other too, leading to formation of ***Ama*** in the different stage of ***Paka-karma***. Lastly we can say that ***Agni*** plays very important role in growth, development & maintenance of the body. As discussed above if we prevent Mandagni we can cure many of Psychosomatic diseases along with other Physical disorders through implementation of concept of Agni along with Nidan parivarjan.So very Ayurvedic Physician and Surgeon should have proper Knowledge of Agni and its Clinical Implementation in the practice of ayurveda.

The Goal of all medical professionals to serve the society at any cost so Aachaya susurut coded a nice verse that "No professional is holy like Medical professional"(Su.Sha.Kalpasthan8/142) [37]

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Anaemia in Children: An Ayurvedic review

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Abstract: Anaemia is a global public health problem with major consequences for human health. Anaemia is defined as a qualitative or quantitative deficiency of haemoglobin. In Ayurveda the nearest correlation of iron deficiency anaemia (IDA) can be made with Pandu Roga, because of the predominance of Panduta or pallor in the whole body. Iron deficiency is a very common nutritional disorder worldwide and is known to affect approximately one third of the global population. Though every age group is susceptible to the affliction of Pandu roga, it is more common in small children and pregnant women due to the intake of iron deficient diet or less iron content in diet. Early childhood is considered to be a most important phase in life. Early growth and development of a child's life is fundamentally important. They are the foundation that shapes children's future health, happiness, growth, development and learning achievement at school, in the family and community, and in life across the life span. Studies have reported lower performance scores among infants who had been anaemic for at last three months compared to those anaemic for less than three months. In general, the severity of anaemia is differentiated by the severity of the reduction in haemoglobin (Hb) level.

Key words: Anaemia, Pandu, Iron-rich foods, Haemoglobin etc. .

Introduction: Anemia is the lack of red blood corpuscles and hemoglobin in the blood. Anemia usually means 'without blood'. This is defined as a qualitative or quantitative deficiency of hemoglobin. Hemoglobin is a molecule inside red blood cells (RBCs). Hemoglobin carries oxygen from the lungs to the tissues. Anemia leads to hypoxia i.e. lack of oxygen in organs.

In Ayurveda the nearest correlation of iron deficiency anaemia (IDA) can be made with Pandu Roga, because of the predominance of Panduta or pallor in the whole body. A prominent diagnostic feature of Pandu Roga is the pallor on the skin which occurs due to the quantitative and qualitative deficiency of rakta dhatu (blood tissue) caused either in the form of deficiency of haemoglobin and/or red blood cells (RBCs). Considering Panduta (pallor) as the predominant sign, the disease is termed as Pandu Roga.

Classification of anaemia according to severity:

	Children 0 months to 5 years
Non-anaemic	≥11 g/dL
Mild anaemia	10-10.9 g/dL
Moderate anaemia	7-9.9 g/dL
Severe anaemia	<7 g/dL

Source: WHO/UNICEF/UNU. Iron deficiency anaemia: assessment, prevention, and control. Geneva: World Health Organization; 2001. (WHO/NHD/01.3).

Anaemia is a global public health problem with major consequences for human health and has affected more than 2 billion people worldwide [1], [2]. Though every age group is susceptible to the affliction of Pandu roga, it is more common in small children and pregnant women due to the intake of iron deficient diet or less iron content in diet. Among these affected population, children under 5 years is one of the most vulnerable groups, especially those in the first 2 years of life [3].

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Families of poor income group are unable to afford proper diet and due to improper and imbalanced diet, children of those families may get the disease. As per the WHO report iron deficiency is most common among groups of low socio-economic status.

The disease Pandu roga is equally prevalent in both vegetarians and non-vegetarians. The disease is more prevalent in the children having the Prakriti dominant in Pitta. As Pandu roga is Pitta dominant tridoshaja vikara (disease caused due to anomalous behaviour of all the three doshas) and under-nutrition is commonly found in Vata dominant persons so probably this might be the reason of majority of patients being of Vata-Pitta Prakriti group in the present study. Mandagni and Madhyam koshtha are observed in maximum patients. Consuming insufficient diet due to Mandagni leads to malnutrition, the root cause of disease. According to Ayurveda abnormal function of Agni is the root cause of all diseases. Madhyam Koshtha showing dominance of Kapha leads to improper digestion, which is the important cause of any disease. Kapha Dosha is predominant during childhood period and kapha dosha also plays an important role in the pathogenesis of the disease.

Early growth and development of a child's life is fundamentally important. They are the foundation that shapes children's future health, happiness, growth, development and learning achievement at school, in the family and community, and in life across the life span. Early childhood is considered to be a most important phase in life. Studies have reported lower performance scores among infants who had been anaemic for at last three months compared to those anaemic for less than three months. No significant deficit was detected in infants with intermediate levels of iron deficiency or pre-anaemic iron deficiency. Significant differences in mental development scores have been observed at haemoglobin concentrations less than 10.5 g/dl [4]. Children who are deficient in iron during infancy, even though they have been provided treatment for the condition at that time, after 10 years, are found to score significantly lower than controls on measures of mental functioning [5]. Epidemiological evidence has shown that anemia in children impaired psychomotor development and immune competence, led to poor cognitive and physical development, caused mental retardation, and increased their mortality and morbidity [6]–[11].

According to WHO, Child development refers to the biological, psychological and emotional changes that occur in human beings between birth and the end of adolescence, as the individual progresses from dependency to increasing autonomy.

Cognitive development is the process by which the brain develops the abilities to learn and remember. In other words, cognitive development is the emergence of the ability to think and understand.[4] Jean Piaget was a major force in the establishment of this field, forming his "theory of cognitive development". Piaget proposed four stages of cognitive development: the sensorimotor, preoperational, concrete operational and formal operational period.[12] The first stage in Piaget's Stages of Cognitive Development is the sensorimotor stage. This stage lasts from birth to two years old. Behaviours gradually move from acting upon inherited reflexes to interacting with the environment with a goal in mind and being able to represent the external world at the end.

Effect of Iron-deficiency anemia on baby's health:Maternal anemia can affect a baby's iron stores at birth, increasing the risk for anemia later in infancy. Iron-deficiency anemia during pregnancy is linked to an increased risk of preterm delivery and low birth weight. It's also associated with a higher risk of stillbirth or newborn death. It is generally assumed that the iron status of the fetus, and subsequently the infant, is quite independent of maternal iron status during pregnancy, except perhaps when infants are born to severely anemic women.

After birth, milk is the major source of iron. Breast milk will supply the newborn with adequate amounts of iron for at least the first six months of life. Milk is a poor source of iron after the age of one year. Because growth is so rapid during the first year of life, iron intake might still not meet the demands of the growing child. If the anemia is due to iron deficiency, additional iron may be prescribed. Breastfeeding is beneficial for nutritional, immunological and cognitive development in infants. Breast feeding provides optimum health, nutritional, immunological and developmental benefits to the newborns as well as protection from postpartum complication and future disease for mothers (American academy of pediatrics, 2005). Significant difference between the growth rates of formula and breast fed infants was first reported in the DARLING (US) study [13] showing that breastfed infants grow more quickly.

Epidemiology:Iron deficiency is a very common nutritional disorder worldwide and is known to affect approximately one third of the global population. While its incidence in affluent countries is low, the incidence of IDA in India is very high. According to National Family Health Survey (NFHS) III data, the incidence of anaemia in urban children is 71%, rural is 84%, and overall is 79%. [14] Nutritional iron deficiency is the most common cause of anaemia in India. [15]

In general, the severity of anemia is differentiated by the severity of the reduction in hemoglobin (Hb) level [16]. Severe anemia usually comprises a small proportion of the cases in children but may cause a large proportion of the severe morbidity and mortality [3]. A research on malaria-associated severe anemia in Sub-Saharan Africa showed that children admitted to hospital with severe anemia were more likely to die than those without anemia [17]. A world-wide report also showed that moderate-to-severe anemia increased the risk of mortality in the vulnerable population [2].

Causes:L Nutritional iron deficiency is the most common cause of anemia in India. Anemia may be caused by loss of blood through excessive menstruation, injury, childbirth, bleeding from the gastro-intestinal tract. Certain diseases like purpura and hemophilia, thalassaemia, Rheumatoid arthritis, Liver disease, malignant disease which are characterized by bleeding, can also be the cause. Defective blood formation because of infections, toxins, and drugs and also inadequate intake of iron and defective absorption of substances in the diet, which enrich the blood, are the causes.

According to Ayurveda:Causes of *Pandu roga* are related to dietetic habits, daily regimen and *nidanarthkar vyadhi* (means diseases that lead to pandu). Food, which contains sour, bitter, salty taste, less sleep at night, more sleep during the day time, excessive exercises, and suppression of natural urges, excessive thinking, sadness and anger lead to *Pandu roga* as well.

Nidan that is reasons according to ayurveda -Opposite food i.e. Wrong mixtures in food intake or viruddh ahar is one of the important reasons for anemia. Many times people take foods together which are not supposed to be taken together. Such a mixing causes vitiation of doshas or form toxins in body. If that becomes part of regular diet for long time .Milk along with banana or any other fruits, fruit salad is considered to be best example. Hot & spicy food coupled with ice cream or milk shakes is also viruddh. Rice salt and milk or fish and milk is also viruddh ann or opposite food. Hot and cold together is also viruddh. Now a days there is fashion of preparing vegetables with milk or cream as a base which due to salt and sour taste in it is viruddh ann. Edibles with sour taste e.g. orange, lemon, curds, tomato etc. in excess. Sometimes fermented foods are used in abundance which are sour in taste they may cause pandu. Eating soil by children or in childhood, oily foods are all reasons of pandu rog. Pregnant women are supplemented with iron, because dietary iron may not be sufficient for both mother and baby and may cause panduta. Habit to sleep

in the afternoon may cause pandu, regular habit of liquor is another one, some people who eat much more salt or salty food like wafers cheese etc. are prone to have pandu roga.

Signs and symptoms : The best guide, however, is the colour of the internal lining of the eyelid. There is weakness and giddiness, the breathing is shallow, the pulse rapid, and the blood pressure is often becomes low. In severe cases, the tongue is often sore and the nails of the fingers brittle and concave instead of being convex. If the disease is ignored, it may turn into pernicious anemia, which is more difficult to cure. Iron-deficiency anemia affects health as well.

Poorvarupa (Prodromal symptoms): These are fatigue and lassitude, breathlessness on exertion, loss of appetite, absence of sweating, dizziness, dimness in vision, headaches, rapid pulsation, blood pressure often becomes low, pallor of skin and mucous membrane, anorexia and dyspepsia, tingling and pins and needles sensation in the fingers and toes, edema, palpitation, tachycardia, cardiac dilatation, systolic murmurs.

Roopa (Sign and symptoms of Pandu roga in general): Tinnitus, general weakness and debility, giddiness, body pain, dyspnoea, heaviness, swelling of orbital region, paleness, loss of body lustre, brittle nails and concave instead of being convex, falling of body hairs, behavioural changes like irritation, getting angry often, speaking less, always feels sleepy, cramps in calf region, the tongue is often sore.

Samprapti (The Progressive Stages of disease): Practicing pitta aggravating factors, Predominantly pitta and all doshas get aggravated, Produce Raktadusti, rakta alpata and nisaarta(blood affliction, decreased amount).

*Nutrients that help in iron absorption:*Eating or drinking something rich in vitamin C when you take your iron supplement or eat iron-rich plant foods can help your body absorb significantly more non-haem iron. Good vitamin C choices include a glass of orange or tomato juice, a handful of strawberries, sliced bell peppers, or half a grapefruit. Eating meat and fish (sources of heme iron, which your body absorbs easily) can also improve your absorption of the iron in non-meat foods.

*Nutrients that interfere with iron absorption:*Calcium hinders your body's ability to absorb iron. For that reason, don't take your supplement with milk. Drink milk between meals, instead. The same goes for tea and coffee, which contain polyphenols that interfere with the absorption of iron from supplements and plant sources. In order to absorb as much of the iron as possible, it's best to take your iron pills on an empty stomach. Wash them down with water or orange juice (the vitamin C helps with absorption), but not with milk (calcium interferes with absorption). Coffee and tea also hinder absorption.

Treatment of Pandu rog:The patient suffering from pandu roga should be given emetic and purgation therapies with unctuous and sharp drugs for the cleansing of the body (to eliminate doshas). After the gastro-intestinal tract is cleansed by the above therapies, the patient should be given wholesome food containing old shaali type rice, barley and wheat mixed with vegetable soup and meat soup. After this, on the basis of aggravated doshas specific medicines are administered. Emetic therapy helps in removal of doshas through upward tract and purgation helps in their removal through downward tract.

Diet:Depending upon the appetite of the patient, they can take less quantity of food, but frequently.

Vegetables: fenugreek, spinach, soybean, sesame seeds, radish, tomato, onion, carrot etc.

Dry fruits: raisins and almonds

Fruits: bananas, black grapes, plums, strawberries, pomegranate, apples

Milk and Fruit juice twice a day.
Light foods free from fats and sour substances
Sweet mango is like nectar for such a patient.
Some medicines like gomutra (Cow's Urine) mixed with Godugdh/Triphala decoction, gomutra, haritaki, Navaysa churna (Powder), Mandur bhasma yoga, Mandur vataka, Punarnava Mandoor, Yograj Rasa, Shilajit vatak, Dhatri arishta, dhatri avaleh.

Conclusion:In children, iron deficiency anaemia has been associated with psychomotor and cognitive abnormalities, poor school performance, and mental retardation. Increasing iron intake by consuming more iron-rich foods or taking supplements can cure Iron Deficiency Anaemia by getting to the root of the problem and replenishing stores of iron in the blood. The circulating Red Blood Count mass also increases. Finally, the oxygen-carrying capacity of the blood returns rejuvenating the individual who suffered with the disease. Being conscious of how other foods and drinks interact with absorption of iron is also important. While Iron Deficiency Anaemia has many aggravating symptoms, its causes are fixable, and a person suffering from this disease can be cured by some relatively simple treatments.

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Effect of Dinacharya (AyurvedicLife Style) For Healthy Living

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Abstract: World Health Organization has defined health as follows – *"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."*

Ayurvedic definition of health – 'Health is a state where in the Tridosha, Digestive fire, all the body tissues & components, all the physiological processes are in perfect unison and the soul, the sense organs and mind are in a state of total satisfaction *(prasanna)* & content"

Only healthy individual of sound body and mind can endure social and cultural pressures. Health not only means freedom from the disease, butthe ability to work with the satisfaction and self-control. Health is the best root factor in achieving Dharma (attain pious acts), Artha(wealth), Kama (desire) and Moksha (salvation). Lifestyle change, more than any other factor, is considered to be the best way of preventing the disease and early death in our society. The most important is unhealthy lifestyles contribute to more than half of all early deaths. One who wants to keep fit himself for whole of his life time should also be fit for every day. Health depends on how one spends day. The ideal life style for a day is called as daily regimen (Dinacharya).Daily regimen explains the various duties from one day to the next day.

Keywords: Health, Daily regimen, Life style disorder, Food items

Introduction:Ayurveda gives importance to maintenance of health of a healthy person and curing the disease of an ill. To maintain the health some activities are mentioned in Ayurveda under the term dinacharya. By following daily regimen (Dinacharya) one will be able to follow a healthy lifestyle thereby maintaining health. A person in good health should wake up, for protecting his life in Brahma muhurta, after considering the position of digestion or indigestion. One should excrete the urine and faeces only after getting the urge, facing the north during daytime and should south during night. One should do achamana(clean) after the following acts- touching excreta, tears, fat, hair, and nailsseparated from the body, after taking bath, before and after taking the food and getting up from the sleep and after sneezing. After this one should chew the danthadawana(Brush) sticks meant for cleaning the teeth. Sticks used for brushing teeth should be of Arka, Khadira, Karaveera, Arimeda, Apamarga. They should be astringent, bitter .One should daily apply the collyrium called Sauviram, which is beneficial to the eyes; by this eyes become beautiful, sharp to see even minute objects. Then Anutailais to be dropped into the nose & next gandushashould be held. One should next undertake use of smoke i.e, inhalation of smoke.Actions which produce weariness to the body are called exercise or Vyayama. By exercise, feeling of lightness of the body, ability to do work, intensity of fire, reduction of fat is produced.Massage of the body subsides, Kapha, dissolves the fat produces firmness to the limbs and gives good appearance to theskin.Bath stimulates digestive fire, increases span of life Ojusand strength. It also removes itching, dirtiness, fatigue, sweat, lassitude, thirst etc. One should take the food, according to the rules laid down with a pleasant mind, after offering to fire- God, after giving charity to poor food should be prepared all and not for self alone.

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Discussion: Life style disorders-Overweight and obesity are associated with high blood pressure / cholesterol levels and increased risk of developing diabetes (insulin resistance). Excess body fat accounts for nearly 60% of diabetes and 20 % of cardiovascular disease respectively. Elevated cholesterol alone is responsible for 60% of CVD morbidity globally18.Major diseases of the 21st century like diabetes and hypertension affects our body and causes very severe effects over body. They are remaining silent for 5 to 7 years. Thus they are called as 'silent killers'. They effect very severely over vital organs like- kidney, eye, heart, brain etc. There can be no symptoms for diseases like -high cholesterol, high blood sugar, and high blood pressure. All these diseases are caused due to unhealthy lifestyle and dietary habits. People who experienced chronic anxiety, long period of sadness and negativity, unremitting tension were found to have double the risk of disease- including asthma, arthritis, headaches, peptic ulcers and heart disease.Now a days the above mentioned life style disorders are affecting today's society, as one of the quotation says that "Prevention is better than cure". We can prevent the diseases by maintaining the life style. For preventing the diseases we should follow the above mentioned healthy diet, exercise, positive attitude and yoga. So these lead to the healthy life style. Waking up in Brahmimuhurthai.e. 'two hours before the sunrise', Brahma is knowledge, which is gained by reading. It is the time which is ideal for gaining of the knowledge. And also now a day, there is a lot of pollution in the environment. And inthe morning hours it will be clean without pollution. Along with the clean air, the pleasantatmosphere, absence of noise, the morning rays of the rising sun is very beneficial to the health. Sun is the god of health. Health is got from the sun. So, one should get up early in the morning before sunrise.

Achamana means to wash, which will be done after cleaning the excreta, tears, sneezing, and after travelling. It will helpful for the digestion of food, and also evacuation of the bowel completely. Dantadhavana: One should brush in the morning with twigs of Arka, Vata, Khadira, Karanja, and Arjuna. One should brush in vertical direction from bottom to top. So by doing this it brings freshness, takes away the bad odor, coating on the teeth and creates desires for the food. But in modern age by using chemicals the pastes are going to be prepared. So those are not useful for the modern era to have a long life. **Jihvanirlekhana**: It should be done with the help of gold, silver, or iron. It will benefit in bad odor of mouth, cure edema, and gives taste. Now a day those metals are very costly so at least we can use at least steel items. Gandusha and Kavala: It gives strength to mandible, clarity of mouth, lightness and clarity of sense organs. And also gives good taste. In modern era such items are prepared with chemicals, so one should avoid those chemical items. Anjana: It cleans the eyes, which makes them shine like the bright moon in clear sky. Dhumapana: Smoking is the procedure to take smoke through the nostril and then through the mouth. It gives benefits like lightness of the chest, throat, head, and liquefaction of the Kapha. In modern era smoking is completely different and fashionable because they are taking the smoke through the mouth and leaving out through the nostril. And that cigarette contains nicotine like harmful things which will affect the lungs. So by smoking with these things instead of increasing the life span they will decrease the life span. Nasya: Head is considered as the most important part of the body. So nose is the entry way for the head. It causes benefits like lightness of the head, proper sleep, and awakening, cure of diseases, clarity of organs, and pleasant mind. In modern days nasal insufflations are there. So they are prepared from plant origin they are good for health.

Vyayama: by doing regularly exercise nourishes the body, gives good complexion, proportionate the body parts, enhances agni, avoids laziness and obesity, provides lightness of the body parts, and also avoids early aging. It lowers the body fats, reduces the risk of heart disease. And lowers LDL and raises HDL. It helps for the controlling the blood sugar, reduces the risk of osteoporosis and cancer, helps for giving energy, reducing the stress, improves the sleep, to enhance mode of work and the self- esteem. In modern days about exercise they are having knowledge so that will improve individual life span. Abhyanga: By taking proper massage it delays aging, cures tiredness and vatadisorders, and improves vision, complexion, nourishment, life, sleep. And by doing padaabyanga, it provides strength and stability to feet, improves the vision and pacifies the vata. By doing Shiroabyangait prevents thebalding, graying, hair fall, strengthens thehair root, and makes the hair long and black.And it also nourishes the sense organs, softensthe skin, Udvartana: By doing this blood vessels become dilated and complexion in the skin is enhanced. Cures rashes, vatadiseases, enhances the strength of thighs, and providesthe lightness.Samavahana; Gentle massage enhances theaffection, sleep, virility, avoids the Kaphaand also improves the circulation.By massage therapy the people will have anidea about the benefits. So the people are interested to go towards the massage centers.They will definitely increase the life span ofthe individual.Snana: Taking bath is auspicious, enhancesvirility, longevity, strength, compactness and ojus, at the same time it cures tiredness, sweat and impurities of the body. It takes away the sleep, burning sensation, sweat, thirst and unpleasantness due to sweat. Aahara: One should start Aharawith Madhurarasa then amla, lavana, tikta, katu,Kashayaa. Like this one should take Aharain a chronological order. And one should take anupanaas jala. Because this Ahararasa gives strength, bala, varna, pushti,dhatuposhana, indriyaprasadataetc.

Healthy food: Fruits, roasted cereals like gram, peanuts, pulses etc. Sprouted cereals, Puffed rice, ChholeGhanji, butter milk (mattha) are considered as healthy food items. It is needed to change our style of food as: Consume a diet rich in vegetables and fruits (all colored), avoid eating more high calorie fruits (mango, banana, jack fruit etc), whole fruit is better than fruit juice because it contains fiber. Vegetables which are green, reduces fat and blood sugar level. Stop or minimize alcohol intake, because alcohol is hollow calorie drink. And have sufficient water such as 3 to 3.5 lit/day. Prepare food by boiling, roasting, steaming, baking and avoid frying. Tambula: After taking the food one should take Tambula(betel leaves and nut) because it will gives oral hygiene, digestion of food, gives good smell. And improve functions of Indriyas.

Mental and social health: Now a day we are seeing the 80% 0f diseases are psychosomatic. For every emotion there is chemical secretion in the body like anger, hostility, frustration, violence, depression, etc. Factors which decide our attitude are environment: (home, school, work, media, cultural, religious, social, political etc.) Experience: (reference point of our actual experience).Education: (formal and informal), etc.

Conclusion: Ten healthy lifestyles have been identified that are associated with reduced disease risk:

a) Increased wellness b) Regular physical activity c) Eating well d) Managing stress e) Avoiding destructive habits f) Practicing safe sex g) Adopting good safety habits h) Learning first aid i) Adopting good personal health habits j) Protecting the environment. Just as unhealthy lifestyles are the principal causes of modern-day illnesses, healthy lifestyles can result in an improved feeling of wellness that is critical to optimal health. In recognizing the importance of "Years of healthy life," the public health service also recognizes what it calls "Measures of wellbeing." This well-being or wellness is associated with social, mental, spiritual, and physical functioning. So "Health management is free and enjoyable; But disease management is very costly and painful."

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VEDANA- Vision Of Ayurveda And Modern context

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ABSTRACT: Pain has been the biggest problem since creation. All the systems of philosophy have taken origin in search of the methods how to relieve pain. Not only the philosophers but in medicine also this was considered as the basic problem. The word 'Roga' itself denotes painful situation. The main object of medicine and surgery is to ameliorate the suffering of living beings.The Charaka Samhita & Sushruta Samhita, it is quite clear that Ayurveda came into existence to eliminate the pain and suffering of the living being.Charaka clearly says that health is happiness and disease is pain. On the same basis, life also has been classified into two broad divisions, Sukha and Dukha In Shalya Tantra this problem has been more predominant because of the traumatic nature of ailments which afflicted the body and mind with severe pain. This requires an urgent management of the problems by the surgeons who applied the necessary methodology to manage the situation effectively. Ancient texts like Rigveda mentioned certain surgical operations one can wonder what could be the method of preparation of patient in those days, particularly in the aspect of suppressing of pain.In Shalya Tantra there were many treatises prevalent during those days. Some of which like Bhoj, Puskalawat, Vishwamitra, Karvirya, etc. are found only as quotation in latter commentaries. But unfortunately no other texts except Sushruta Samhita no other text is available and that is why it has been regarded as the representative of the surgical school of Ayurveda.The theory of tridosha is the basis of Ayurveda, one will have to consider this also while studying the present problem. Tridosha is concerned with life and is the primary factor for maintaining and controlling the biological phenomena of the li*****8**888**Pain is pathological symptom predominantly caused by vata. Hence while screening the drug for this problem we shall have to keep these in mind and select some outstanding drugs which may prove useful in this regard.But there may be some other drugs which might be effective due to the Prabhava, i.e. specific action which cannot be explained on the lines of Rasa, Guna, Virya, Vipaka. Acharya Charaka has classified drugs and made group Vedanasthapniya. The word Vedana may be interpreted in two ways. It may denote pain and also sensation in general, therefore, it indicates that the problem of pain was hurting in the mind of ancient ages equally as we are anxious today to find out some effective drug.

CONCEPT OF NERVOUS SYSTEM IN AYURVEDA:

The three body humors, responsible for physiological functions are Vata, Pitta and Kapha. These are essential components to maintain the integrity of the human body. When these are vitiated, the diseases are produced called Vikara.

Vata:

Sushruta has mentioned following main functions of vata are:

Udvahanam – Conductivity of sensory impulses.

Praspandan – imparting motion to the body.

Puran – The actions like deglutition, peristaltic movements of the stomach, intestines, etc.

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Vivechan:

Dharan – Retention and evacuation of urine.

However Charaka has mentioned Utsaha (enthusiasm), inspiration and expiration, chesta (voluntary actions in elimination of waste products) by the main function of Vata. Physiological activities of the body are controlled by brain which is the centre for Vayu. According to Charaka brain is also the seat of Vayu and responsible for sensory function.

Pitta

Charaka has described that vision, digestion, temperature regulation, hunger, thirst, complexion, intellect, courage, fear, anger, pleasure are the main function of Pitta.

Kapha

Charaka has described that the main function of Kapha are – snehan, bandhan, sthiratwa (firmness), gaurava, vrishatva (sexual potency and fertility) bala (immunity again disease) etc.

CONCEPT OF PAIN IN AYURVEDA:Vedana, Shoola, Dukha, Ruja, Pida. Being subjective feeling intensity of pain differs from individual to individual, time to time, site to site. It depends greatly upon susceptibility of mind. Pain sensation is more prominent in Vataja prakriti patients and other individuals with vitiation of Vata.

Dukha has been divided into three types:

Adhyatmik Dukha (psychosomatic pain)

Adhibhautik Dukha (pain produced by animate and non animate substances)

Adhidaivik Dukha (caused by divine and evil sources)

Further Adhyatmik Dukha has been divided into two types:

Sharirik Dukha (physical suffering)

Manasik Dukha (Psychic suffering) Su. Sutra 35-5, 34-3.

Charaka depict pain as Vedana which is both physical and mental measures. Mana (mind) is responsible for both happening and miseries (pain). In the manifestation of pain mind takes the major role.

TYPES OF VEDANA / PAIN:1. Pain of Vatika Vrana 2.Pain of Paittic Vrana 3. Pain of Raktaj Vrana 4. Pain of Kaphaja Vrana 5. Pain in Sannipataj Vrana

Sushruta has described following types of Shoola:

Parshava shoola - Su. U. 42/188-119. Kukshi shoola - Su. U. 42/124-125.

Hridh chhula - Su. U. 42/132 Vasti shoola - Su. U. 42/134

Mutra shoola - Su. U. 42/135 Purish shoola - Su. U. 42/136-139

Awipakaja shoola - Su. U. 42/142-144 Prasav pida (labour pain)

Shiro Ruja (Headache) -Su. U. 25/3 Shoola is also complication of disease - Su U. 42/67

Traumatic pain is also described by Sushruta in Su. Su. 5/42 and Su. Chi 2/82

Pain due to Burn - Su. Su. 12/16 Pain due to foreign body - Su. Su. 27/22

Pain is commonest symptom of Trauma - Su. Chi I/6

MODERN VIEW: Pain is one of the most common terms used in medical science. It is subjective, unpleasant or uncomfortable sensation which individual learns in his gradual course of development.

"Pain is what the patient says it is, and exists whenever the patient says it does."

In the series of struggle for survival of human race constant battle against physical pain is going on till today. The story is a dramatic one and the present state of achievement in the control of pain is a culmination of many disheartening experiments and isolated triumphs. Prior to 1842 an operative procedure was a struggle for the surgeon and an ordeal for the patients.

Modern anaesthesia is frequently and rightly dated from the demonstration of the inhalation of Ether vapour as a means of allaying of pain of surgery by the dentist William Thomas Green Morton (1819-1868) at the Massachusetts General Hospital in Boston, USA on Friday 16th October, 1846, which is called as "Ether Day". Morton's Boston contemporary Oliver Wendell Holmes (1809-1884) anatomist and physician gave the name "Anaesthesia" (loss of sense of feeling) to Morton's process of "Etherisation".

The word "Anaesthesia" is derived from the Greek word meaning – insensible or without feeling. It may be defined as a progressive depression of CNS beginning with the higher center (cerebral cortex) then basal ganglions, followed by cerebellum and spinal cord. In general anaesthesia there is complete loss of consciousness in which all the sensations and reflexes of the body are generally abolished.

TRIAD OF ANAESTHESIA: Reversible loss of consciousness (Narcosis), Analgesia and Muscle Relaxation

Neurotransmiter or Inflammatory Mediators Related to Pain

Most pain fiber can be excited by multiple types of stimuli which are mechanical, thermal and chemical. If the intensity of the stimulus is below the threshold (sub-threshold) pain is not felt. As intensity increases more and more, pain is felt more and more. According to the Weber-Fechners Law (WFL) the pain sensation spreads in the neighbouring regions also. Mathematically W.F.L. can be expressed as :

$R = \alpha \log S$

Where, R = intensity of the reaction (sense perceived)

α = a constant S = the intensity of the stimulus.

Some fibers are more likely to respond to excessive mechanical stretch, other to extremes of heat or cold, and still others to specific chemicals in the tissues. These are classified respectively as mechanical, thermal and chemical pain receptors.

In general, fast pain is elicited by the mechanical and thermal types of receptors, whereas slow pain can be elicited by all three types. Some of the chemicals that excite the chemical type of pain receptors include bradykinin, serotonin, histamine, potassium ions, acids, acetylcholine and proteolytic enzyme. Prostaglandings are not very algogenic but they potentiate the algogenic power of serotonin and bradykinin. The chemical substances are especially important in stimulating the slow suffering type of pain that occur following tissue injury.

PAIN PATHWAY :The pain receptors are free nerve endings which use separate pathways for transmitting pain signals into central nervous system. Pain is conducted along three neuronal pathways that transmit noxious stimuli from periphery to cerebral cortex. Primary afferent neurons are located in the spinal cord level. Each neuron has a single axon which bifurcates, sending one end to the peripheral tissues it innervates and other into dorsal horn of spinal cord. In the dorsal horn, the primary afferent neuron synapses with a second order neuron whose axons cross the midline and ascend in the contralateral spinothalamic tract to reach the thalamus. Second order neurons synapse in thalamic nuclei with third order neurons, which in turn send projections through the internal capsule and corona-radiata to post central gyrus of cerebral cortex.

The sharp fast pain signals are transmitted by the A-delta fibers while the slow chronic pain is transmitted by type C-fibers. Afferent fibers from visceral structures reach the central nervous system via sympathetic and parasympathetic pathways. In the central nervous system, visceral sensation travels along the same pathways as somatic sensation in the spino-thalamic tracts and

thalamic radiations, and the cortical receiving areas, for visceral sensations are intermixed with somatic receiving areas.

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Different Types of Aganikarma Shalaka Used For Pain Management

***Dr.Pankaj Kr.Bharti **Dr.D.N.Pande.**

Abstract : The use of NSAIDs for Joints pain relief is now routine practice. NSAIDs may given orally, intramuscular or intravenously. NSAIDS produce pain relief without sedation, respiratory depression or nausea vomiting, but their use is limited due to gastric, renal and platelets side effects.In Ayurvedic texts many drug have been mention as analgesic (Vednahar or Shoolaghna) and some modality like Agni Karma, Panchakarma and Siravedhana are being used for management of Pain.Agni Karma is a well established Para surgical modality for Pain management mentioned in Ayurvedic Samhita. Different types of materials were used for this purpose. Dahanopakarana are various accessories like drugs, articles and substances used to produce therapeutic burns (samyak dagdha) during Agni Karma chikitsa. These are Pippali (Piper Longum), Yashtimadhu (Glycerrhiza Glabra Linn.), Haridra (Curcuma longa), Guda (jaggery) Sneha Taila, Sarjarasa (herbal). Ajashakrit, Godanta, Madhoochchhishta (animal-origin). Shara Shalaaka, Jambavaushtha, Sooryakaanta, Soochi and Stone.

Various experimental and clinical studies have been done previously to evaluate the efficacy of many medicinal plants and indigenous compounds in Sangyaharan and Pain Management. Studies on non-pharmacologic approaches like Agni Karma were also conducted and are still going on. Present study was evaluate the efficacy of Swarna and Yasad shalaka for different types of joint Pain.

Key Word :- NSAIDs, Agni Karma, Panchakarma, Siravedhana and Ayurvedic Samhita.etc

Introduction :- The comparative study conducted to evaluate the efficacy of different type Swarna and Yasad Shalaka for Pain Management.

The Clinical study was conducted on 40 patients. Patients of sandhigata vata fulfilling the inclusion crieteria and attending OPD of Sangyaharan vedanahar, Sirsunderlal Hospital BHU, Varanasi. A detailed Performa was prepared incorporating Ayurvedic and modern points

All the patients were randomly divided into two groups First Group were treated with were treated with Swarna Shalaka and Group Two were treated with Yasad Shalaka either sex with narrow height and weight distribution in range of 15 to 70 years. Written consent was taken from each patient willing to participate in the study. The both type of Shalaka were used over the most painful area at weekly interval for three weeks. All patients were assessed on a standard Performa at least of 3 week follow up.

Following clinical parameters were taken into account:-

Karnofsky's Performance scale. Pricking Sensation,
Radiation of Pain, Tenderness and
Swelling

Classical method of Agni Karma procedure was adopted in the form of Poorvakarma, Pradhankarma and Paschat Karma.

Table No. 1. The number of patients and treatment in the selected groups.

Group	No. of Patients	Treatment	Observation
Group I Swarna Shalaka	20	Agni Karma on the most painful part of the body with Swarna Shalaka.	B.T. A.T. 1st sitting A.T. 2nd sitting A.T. 3rd sitting
Group II (Yasad)	20	Agni Karma on the most painful part of the body with Yasad Shalaka.	Same as above

B.T= Before treatment, A.T=After treatment seven days interval.

Table No.2: The mean, standard deviation and statistical comparison of age, weight and height between the groups

Age, Weight and Height(Mean ± SD)			
Group	**Age**	**Weight (in Kg)**	**Height (in cm)**
I	46.60 ±10.20	62.05 ±3.748	164.74 ±5.079
II	49.95±12.30	60.40 ±3.455	155.20 ±2.462
Between the group comparison	t= 0.938	t=1.448	t=7.527
Pearson's Chi-square value 'p' value	P=0.354	P=0 .156	p =0.001

Table No. 2 shows that the mean age and weight of patients in the both groups are similar. But the statistical comparison of mean height between the groups is highly significant.

Table No.3: The distribution of Patients according to gender and statistical comparison between the groups:

Gender No and their Percentage (%)		
Group	**Male (%)**	**Female (%)**
I	8 (40%)	12 (60%)
II	13 (65%)	7 (35%)
Between the group comparison Pearson's Chi-square value &'p' value	χ^2 = 2.506 p =0 .113	

Table No.3 shows that out of total 40 patients there were 21 male patients and 19 female patients. The statistical comparison between the groups showed identical result.

Table No.4: The incidence of dietary habits of the patients of different groups and their statistical comparison:

Dietary Habit No and %			
Group	**Mixed**	**Vegetarian**	**Total**
I	11 (55%)	9 (45%)	20
II	10(50%)	10 (50%)	20
Between the group comparison Pearson Chi-Squires & p value	χ^2 = .100 p = 0.752		

Table No.4 showed that 21 patients were of mixed type of dietary habit and 19 patients were vegetarian. The statistical comparison between the groups showed the difference to be statistically significant.

Table No.5: The various professions of the patients in the different groups and their percentage.

Profession of the Patients						
Group	**Agriculture**	**Business**	**House wife**	**In Service**	**Total**	**Between the group comparison Pearson Chi-Square**
I	2(10%)	4 (20%)	12 (60%)	2(10%)	**20**	$\chi^2 = 8.44$ p =0.038
II	7 (35%)	8 (40%)	4(20%)	1 (5%)	**20**	

Table no 5 shows that out of 40 patients 9 patients were related to agriculture field 12 patients were businessman 16 patients were house wife and 30 patients were in service

Table No.6: The mean, standard deviation and statistical comparison of Visual Analogue Scale scores between the groups at successive visits

	VAS mean ± SD				
Follow up	Group I	Group II	Between group Comparison Un Paired t test	-	-
BT	6.30±0.65	5.70±97	t=.228p=0.029	-	
ATI	4.60±1.14	4.50±1.05	t=. 288p=0.775		
AT 2	3.40±0.88	3.80±0.76	t=1.529p=1.34		
AT3	1.70±0.47	3.15±0.75	t=7.360p=0.001		
Within group comparison Paired t test	mean ± SD			% Decrease in Pain Gr.I	Gr.II
BT VS AT I		1.20±5.23 t=10.25p=0.000	-	26.98%	21.05%
BT VS AT 2	2.90±0.96 t=1.39p=0.000	1.90±0.72 t=11.83p=0.000	-	46.03%	33.33%
BT VS AT3	4.60±0.75 t=27.28p=.000	2.55±0.61 t=18.88p=0.000	-	73.01%	44.73%

B.T= Before treatment, A.T=After treatment at seven days interval.

Table No. 6 shows Tenderness The VAS in Group-I was at Initial visit (before treatment-BT) 6.30±.650 at 1st Follow-up 4.60±1.14 at 2nd Follow-up 3.40±0.882 and at 3rd Follow-up 1.70±0.470 respectively.The VAS in Group-II was at Initial visit (before treatment-BT) 5.70±0.97 at 1st Follow-up 4.50±1.05 at 2nd Follow-up 3.80±0.76 and at 3rd Follow-up 3.15±0.74 respectively.

The Inter group comparison of mean VAS was statistically H.S (p<.001) at 3rd sitting. Mean VAS statistically significant decreased at 1st sitting and 3rd sitting compared to initial BT in both the groups.The mean VAS statically highly significant (p<0.001) decreased at 1st 2nd and 3rd sitting compared to the initial in both the groups.

It was observed that this percentage relief was highest in Group I at 3rd sitting.

Table No.7: The mean, standard deviation and statistical comparison of Karnofsky's scale scores between the groups at successive visits: and mean value of Karnofsky's scale before and after therapy within the groups:

	Karnofsky's scale scores mean ± SD	Between group Comparison

Follow up	Group I	Group II	Mann-Whitney test
BT	0.70±0.57	0.80±0.52	Z=.615 p=0.539
ATI	0.30±0.47	0.45±0.51	Z=.967 p=0.333
AT 2	0.05±0.22	0.30±0.47	Z=2.054 p=0.040
AT3	0.00±0.00	0.00±0.00	Z=.00 NS
Within group comparison Wilcoxon signed Rank Test	mean ± SD		-
BT VS AT I	0.40±0.40 Z= 2.82 p=.005	0.350±0.489 Z= 2.646 p=.008	-
BT VS AT 2	0.65±0.48 Z=3.606p=.000	0.5 0±0.68 Z= 2.673 p=.008	-
BT VS AT3	0.70±0.57 Z=3.500p=.000	0.80±0.52 Z= 3.77 p=.000	-

B.T= Before treatment, A.T=After treatment at seven days interval.

Table No. 7 shows Karnofsky's scale score in Group- I at initial visit i.e. before treatment was (BT) 0.70±0.57 , at first follow-up 0.30±0.47 , at 2nd follow-up 0.05±0.22 and at final follow-up 0.00 ±0.00 respectively.

The Karnofsky's scale score in Group- II at initial visit i.e. before treatment (BT) 0.80±0.52 , at first follow-up 0.45±0.51 , at 2nd follow-up 0.30±0.47 and at final follow-up 0.00 ± 0.00 respectively.

Between the group comparison of Karnofsky's scale score by applying Mann-Whitney test showed statistically significant initially as well as at 2nd sitting .Though it was not significant at Table also showed that mean Karnofsky's Performance Scale decreased at 1st, 2nd and 3rd sitting as compared to BT in both the group and the decrease was statistically highly significant

Table No.8: The mean, standard deviation and statistical comparison of Pricking Sensation between the groups at successive visits: and mean values of Pricking Sensation before and after treatment within the groups.

	Pricking Sensation mean ± SD		Between group Comparison Mann-Whitney test
Follow up	Group I	Group II	
BT	0.30±0.47	0.40±0.59	z=.431 p= 0.667
ATI	0.15±0.36	0.10±0.30	z=.472p =0. 637
AT 2	0.00±0.00	0.05±0.22	z= 1.00p= 0.317
AT3	0.00±0.00	0.00±0.00	z=.00 NS
Within group comparison Wilcoxon signed Rank Test	mean ± SD		
BT VS AT I	0.15±0.36 Z= 1.732 p=.083 (NS)	0.30±0.47 Z= 2.44 p=.014	-
BT VS AT 2	0.30±0.47 Z= 2.44 p=0.014	0.35±0.48 Z= 2.646 p=0.008	-
BT VS AT3	0.30±0.470	0.40±0.59	-

	Z= 2.44 p=0.014	Z= 2.530 p=0.011	

B.T= Before treatment, A.T=After treatment at seven days interval.

Table No. 8 shows Pricking Sensation score in Group-I at initial visit i.e. before treatment (BT) 0.30± 0.47, at first follow-up 0.15 ± 0.36, at 2nd follow-up 0.00 ± 0.00 and at final follow-up 0.00 ± 0.00 respectively.

Pricking Sensation score in Group- II at initial visit i.e. before treatment (BT) 0.40 ± 0.59, at first follow-up 0.10 ± 0.30, at 2nd follow-up 0.05 ± 0.22 and at final follow-up 0.00 ± 0.00 respectively. Between the groups comparison by using by Mann-Whitney test showed no significant difference between the Groups at 1st, 2nd and 3rd sitting.

Table also showed that mean Pricking Sensation decreased at 1st, 2nd and 3rd sitting as compared to BT in the both groups.

Table No.9: The mean, standard deviation and statistical comparison of Radiating Pain between the groups and mean value of Radiating Pain before and after treatment within the groups:

	Radiation of Pain mean ± SD		Between group Comparison Mann-Whitney test
Follow up	Group I	Group II	
BT	1.35±1.63	1.35±1.66	z=. 203 p=0.839
ATI	0.90±1.11	1.00±1.21	z=. 088p =0. 930
AT 2	0.60±0.94	0.75±1.07	z= .406 p =0. 685
AT3	0.10±0.30	0.50±0.76	z=1.967 p= 0 .049
Within group comparison Wilcoxon signed Rank Test	mean ± SD		
BT VS AT I	0.45±0.75 Z= 2.310 p=0.021	0.35±0.67 Z= 2.070 p=0.038	-
BT VS AT 2	0.75±0.91 Z= 2.877 p=0.004	0.60±0.94 Z= 2.401 p=0.016	-
BT VS AT3	1.25±1.51 Z= 2.956 p=0.003	0.85±1.13 Z= 2.701 p=0.007	-

B.T= Before treatment, A.T=After treatment at seven days interval.

Table No. 9 shows Radiation of Pain score in Group- I at initial visit was i.e. before treatment (BT) 1.35 ± 1.63, at first follow-up 0.90 ± 1.11, at 2nd follow-up .60±942 and at final follow-up 0.10 ± 0.30 respectively.

Radiation of Pain score in Group- II at initial visit was i.e. before treatment (BT) 1.35± 1.66, at first follow-up 1.00 ± 1.21, at 2nd follow-up 0.75 ± 1.07 and at final follow-up 0.50 ± 0.76 respectively.

Between the group comparisons mean radiation of pain using Mann-Whitney show statically significant difference at 3rd sitting whereas it was not significant initially and at 1st and 2nd sitting.

Table No.10: The mean, standard deviation and statistical comparison of Tenderness between the groups at successive visits and difference in mean value of Tenderness before and after treatment within the groups:

	Tenderness mean ± SD	Between group

Follow up	Group I	Group II	Comparison Mann-Whitney test
BT	0.15±0.36	0.30±0.47	z=1.122 p=0.262
ATI	0.15±0.36	0.15±0.36	z=0.00 NS
AT 2	0.05±0.22	0.15±0.36	z= 1.041 p =0. 298
AT3	0.00±0.00	0.10±0.30	z= 1.433 p=0. 152
Within group comparison Wilcoxon signed Rank Test	mean ± SD		
BT VS AT I	0.00±0.32 Z= .000 p=1.00	0.15±0.36 Z= 1.732 p=0.083	-
BT VS AT 2	0.10±0.31 Z= 1.414 p=0.157	1.50±0.36 Z= 1.73 p=0.083	-
BT VS AT3	0.15±0.36 Z= 1.732 p=0.083	0.20±0.41 Z= 2.00 p=0.046	-

B.T= Before treatment, A.T=After treatment at seven days interval.

Table No. 10 shows Tenderness score in Group- I at initial visit was i.e. before treatment (BT) 0.15 ± 0.36, at first follow-up 0.15 ± 0.36, at 2nd follow-up 0.05 ± 0.224 and at final follow-up 0.00 ± 0.00 respectively. Tenderness score in Group- II at initial visit was i.e. before treatment (BT) 0.30 ± 0.47, at first follow-up 0.15 ± 0.36, at 2nd follow-up 0.15 ± 0.36 and at final follow-up 0.10 ± .30 respectively.Between the groups comparison mean tenderness score by using Mann-Whitney test no statically significant difference at before treatment as well as 1st 2nd and 3rd sitting Table also showed that the mean tenderness score decrease at 1st sitting, 2nd sitting and 3rd sitting as compare to B.T. for both the groups. The decrease at 3rd sitting compare to B.T. was significant for group II only.

Table No.11: The statistical comparison of difference in mean value of Swelling before and after treatment within the groups and between the groups.

Swelling No and % of cases Between the groups comparison Kruskal Wallis test and Within the group comparison Cochran Q Test						**Remarks**
Group	**B.T.**		**A.T.**		**Within the group comparison Cochran Q Test**	
	Present (%)	**Absent (%)**	**Present (%)**	**Absent (%)**		
I	5 (25%)	15 (75%)	1 (5%)	19 (95%)	Q=4.00 p=0.046	S
II	4 (20%)	16 (80%)	1 (5%)	19 (95%)	Q=3.00 p=0.083	NS

B.T.= Before treatment A.T.=After treatment.

Table No 11shows within the group comparison of presence and absence of swelling before and after treatment showed statistically significant difference for group I. where it was not significant in group II.

Discussion

The patients of both the groups were of similar age and weight.
The distributions of gender in both the groups were similar.
The incidences of dietary habit in all the groups were identical.
Pain assessment criteria were based on Visual analogue scale. Significant pain relief was observed in Gr. I
Significant improvement in Karnofsky's performance scale was observed after completion of treatments. Thus it may be concluded that Aganikarma was highly effective for improving physical movement of the patients.
Perception of pricking pain was reduced after three weeks of treatment. Therefore it may be concluded that Aganikarma improves blood supply by reducing swelling and ultimately reduces pricking sensation.
Decrease in Mean radiation of pain was found statically significant after three weeks treatment.
It was observed that difference in mean tenderness score at the level of between the groups was not significant at the level of within group it was statically significant. Thus it may be concluded that Aganikarma therapy reduces the tenderness.
Aganikarma by Swarna Shalaka reduces the swelling after three weeks treatment.
Minimal scar with maximum vedanahar property was found in the group of patients treated with Swarna Shalaka.
Comparison of presence and absence of swelling before and after treatment showed statistically significant difference for group I. where it was not significant in group II.

Conclusion :On the basis of above observations it is concluded that:-

Aganikarma therapy - Para surgical modality is a good therapy for Acute and Chronic Pain Management.
Aganikarma is a very effective therapy for Pain Management (Vedanaharan) to the patients suffering from Joints Pain (Sandhi Shool)
Both type of Shalaka produces satisfactory level of analgesia.
Agnikarma therapy has Shoth-har property (Anti-inflammatory).
Minimal scar with maximum Vedanahar property was found with Aganikarma by Swarna Shalaka.
Aganikarma has negligible side effects with no untoward effects.
Swarna Shalaka produces best result in Acute and Chronic Pain.
Agni Karma is a simple, economical procedure which required no hospitalization.
Thus it can be concluded that Agni Karma possess Vednahar and Soth-har properties without producing any side effects.

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Clinical Relevance of Yoga

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ABSTRACT: Yoga is a physical, mental, and spiritual discipline originated in india. The origin of yoga have been speculated to pre-vedic period mentioned in Rigveda but most likely developed around the sixth and fifth centuries BCE. The yoga sutra of patanjali is unique literature of all the yogic process improving the longivity of a healthy body and mind. It is more popular in the west 20th century. In Vedic Sanskrit yoga from the root yuj means to add, to join, to unite. It is a techniques of controlling the body and mind that is bringing together the parts of body in order to create a balance of persons body, mind and spirit. The meditation processes through yoga help in achieving an emotional balance which creates a remarkable calmness and a positive outlook and also have tremendous benefits on the physical health of the body.

KEY WORDS: Yoga, Rigveda, Pre-vedic period, Meditation

INTRODUCTION: Yoga is not a religion; it is a way of living whose aim is a healthy mind in a healthy body''. Yoga helps to balance a physical, mental and spiritual well being to all humans. In other way we can say any form of physical exercises assume only physical well being but yogic exercises improving overall body mental health and spirituality. In real sense yoga provide better co-ordination between healthy body and mind .This can be achieved through a series of physical and mental exercises, at the physical level various yoga postures or asanas used to keep body healthy, the mental techniques include breathing exercise or pranayama, meditation or dhyana to discipline the mind. The ultimate goal of yoga is to help the individual to transcend the self and attain enlightments. Bhagvata gita says 'A person is said to have achieved yoga the union with the self when perfectly disciplined mind'. gets freedom from all diseases and becomes absorbed in the self alone.

PHYSICAL BENEFITS OF YOGA:

- The purpose of yoga is to create strength, awareness and harmony in both mind and body.
- Yoga can less chronic pain or low back ache, headache, arthritis, carpus tunnel syndrome.
- Increases mobility and flexibility of body.
- Improves respirations, energy and vitality.
- Maintain balanced metabolism.
- Helpful in weight reduction.
- Improves respiratory and cardiac problems.
- Protection and healing from injury.
- Improves atheletic performences.

MENTAL BENEFITS OF YOGA:

Yogic physical exercises can lead to improvement synchrologically between mind and body.It is a core components of the mindfulness based stress reduction. Yoga helps a person to manage stress which have adverse effects on the body and mind .stress can reveal itself in many ways including back of neck pain, sleeping disorder, headache, drug abuse and inability to concentrate. yoga can be very effective in all these adverse condition, developing skills and provide more positive outlook in life.

EFFECT OF YOGA IN VARIOUS DISEASES: Evidences suggests that exrercise programas as asana, dhyana, pranayama and meditation may help people in various disease condition. Hath

yoga has been used as supplementary therapy for diseases condition such as Cancer ,Diabeties, Asthama and Aids**.**

Back ache - Hath yoga may be effective in the management of chronic low back pain. It is seen that reduce in pain intensity and depression for a patient using yoga for a long time.

Migrane- Regular yoga practices is also benefitial in migraines,the cause of migraine is not yet fully understood but it may be a combination of mental stresses and physical misalignment that creats migrains.

Cancer - yoga practices improves the quality of life in cancers patients.

Rheumatic diseases- yoga may also help people with rheumatic diseases. **Bronchial asthma -** Using various method of yoga as breathing exercises suryanamaskaar, asana, pranayama, dhyana it was seen that a significantly greater improvement in asthma patients.

INSOMNIA:

For a long time yoga practices significantly improve sleep quality for peoples suffering from insomnia. It is found that twice weekly yoga sessions helps cancer survivors sleep better and feel less fatigue. This can be achieved by yogas ability to help people deal with stress. Breathing and mental exercises allows the mind to slow down and sleep better.

RELIEVES STRESS, ANXIETY AND DEPRESSION:

Many researches suggests that hath yoga may be effective in management of depression,both the exercises in the form of asana and mindfulness meditation components may be helpful. A few minutes of yoga during the day can be a great way to get rid of stress that accumulates daily in both the body and mind.Yoga postures, pranayama and meditation are effective techniques to release stress.It is also one of the best ways to calm a disturbed mind.

IMPROVE IMMUNITY:

Any irregularity in the body affects the mind and simultaneously unpleasantness or restlessness in the mind can manifest as an ailments in the body.Yoga poses massage organs and strengthen muscles breathing techniques and meditation release stress and improve immunity.

LIVING WITH GREATER AWARENESS AND ENERGY:

Our mind always swinging actively from past to future but never staying in present. Yoga and pranayama help creates that awareness and bring the mind back to the present moment where it can stay happy and focused. Yoga practices a few minutes every day provide the secret to feeling fresh and energetic even after along exerstion. Meditation, pranayama refreshed and recharged for every day.

BETTER FLEXIBILITY AND POSTURE:

Regularly yoga practices stretches and tones the body muscles and also makes them strong. It also helps improve our body posture when we stand, sit, sleep and walk. It also relieves body pain due to incorrect posture. Yoga practices helps to develop the body and mind bringing a lot of healthy benefits.

COMPLETE DETOXIFICATION: Stretching muscles and joints as well as massaging the various organs yoga ensures the optimum blood supply to various parts of body. This helps in the flushing out of toxins every parts of body as well as providing nourishment up to the Last points. This leads to benefits such as delayed ageing, energy and remarkable zeast for life.

CONCLUSION: Yoga through meditation work remarkably to achieve mind work in synchrology with the body. It removes confusion and conflicts in our minds. Stress which is really

the killer, affecting all parts of our physical, endocrinological and emotional system can be corrected through the wonderful yoga practices of meditation. Yoga and meditation together achieve the common goal of unity of mind, body and spirit. In real sense we can say yoga is way of life for healthy body and sharp mind of all human being. With the help of this wonderful techniques we can prevent or lessen the effect of so many critical diseases and got relief from harmful disorders. World health organisation accepted the importance of yoga and declared 21th june every year celebrated as International yoga day. It is proud moment of all Indian that our ancient yoga techniques as asana, pranayama, meditation recognised by global level.

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Non pharmacological approach of management in low back pain with special reference to Agnikarm

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Abstract- Low back pain is the second most common problem for visiting a physician due to many causes to spine pathology like mechanical, radiculopathy ,metabolic
Infections etc. Many non pharmacological approach including life style modification s, use of correct physical postures Asana , Yoga, Panchkarm Abhyang, diet , Parasurgical technique like Agnikarm and Acupuncture, transcutaneous nerve stimulation are different treatment modalities which are better tolerated to patient and cure the diseases with improvement of quality of life.
All above mentioned complementary therapy are responsible for some local and some systemic beneficial effects thus enhance the physiological positive changes like increase in flexibility of joints, better perfusion of organs,removal of excretory waste and muscle relaxation rejuvenation and rehabilitation.
Key Words-Parasurgical technique, Rejuvenation, Agnikarm,
Introduction- In Ayurveda and other system of health care various modalities are being used for management of joint pain & low back pain . Out of these modalities some parasurgical techniques like Agnikarm was well described in ancient time by Acharya Susruta and Charak .
Acharya Susruta has described Agnikarm therapy in different type of pains like Krostrukashirsha, Parshanishoola, Katishoola. Gridhasi, and also in various skin diseases like Leucoderma, mashaka,chippa, medaja galgand, shilpada ect.
There are different scientific explanation can be made on physiological basis to prove the effectiveness of these complementary non pharmacological approach of management.
Discussion- for the proper management of low back ache and for application of appropriate treatment modalities it is essential to know the etiology and pathogenesis of joint disorders.
Differential diagnosis of low back pain-
Mechanical pain is sudden onset precipitated by lifting or bending and pain limited to back or upper leg, persist for less than 3 month .
Degenerative disc disease is a common cause of chronic low back pain . Prolapse of a interverbral disc presents with nerve root pain which can be accompanied by a sensory deficit , motor weakness and asymmetrical reflexes.
Inflammatory back pain due to seronegative spondyloarthritis has a gradual onset and almost always occurs before the age 40 . It is associated with morning stiffness and improves with movements.
Radicular bach pain is typically sharp and radiates from the low back to leg within the territory of a nerve root. Coughing , sneezing or voluntary contraction of abdominal muscle may elicit the radiating pain.
Past history of carcinoma ,tuberculosis ,HIV , systemic corticosteroid use ,osteoporosis.
Spinal stenosis presents with leg discomfort on walking that is relieved by rest.

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Arachnoiditis is a rare cause of chronic severe low back pain .It is due to chronic inflammation of the nerve root sheaths in the spinal canal and can complicate meningitis, spinal surgery.
Spondylolisthesis may cause back pain that is typically aggravated by standing and walking.

Scientific explanation of non pharmacological approach of management of pain-
Agnikarm-It is application of Agni with the help of various material to relieve or cure the disease. After Agnikarm tissue histamine and prostaglandin and bradykinin releases causing smooth muscle relaxation and vasodilation.
-Sufficiently warmed blood reaches the thermo regulatory hypothalamus and causes increased metabolism and perspiration.
- As a result of the increased metabolism , there is an increased demand for oxygen and food stuff and an increased output of waste products, including metabolites.
-In Nervous system there is pain suppression (Analgesia)system in the brain and spinal cord.
-Electrical or heat stimulation eitherin the periaqueductal gray area or in the rahe magnus nucleus can suppress many strong pain signals entering by way of the dorsal spinal roots.
Several transmitter substances are involved in the analgesia system especially involved are enkephalin & serotonin.
Brain`s opiates system- Endorphins & Enkephalins- The two enkephalins are found in the brain stem & spinal cord , in the portion of the analgesia system and B-endorphin is present in both the hypothalamus & pituitary gland.
Dynorphin is found mainly in the same areas as the enkephalin but in much lower quantity.
Fine details of of the brain opiate system are not understood. Activation of the analgesia system by nervous signals entering the periaqueductal gray &periventricular areas or inactivation of pain pathways by morphine like drugs can always totally suppress many pain signals entering through the peripheral nerves.
-The effect of Agnikarm can also be supported by gate control theory of pain.
Acupuncture-In Acupuncture therapy carefull detection of the acupuncture points and fine needling technique with comfortable subject sensation are only considered important.
Gate control hypothesis was an attractive theoretical basis for analgesic action of Acupuncture.
-Activation of thick afferent nerve fibres inhibits transmission.
TENS- Transcutaneous electrical nerve stimulation technique also explain pain control in acupuncture.
Physical postures Asana & Yoga- Complete bed rest are not helpful & can increase disability. Exercise is helpful mainly in chronic low back ache.
In low back pain Asana of backward bending postures like Bhujangasana, Tadasana ect are important.
Panchkarma & Abhyang are also equally important like other modalities for smooth muscle relaxation , better lymph flow which relieves exertion & give soothing effect.
Diet-Vegetarian diet & antioxidant rich food with plenty of fibers helpful to reduce body fat and increases flexibility of joints.
Omega-6 , Omega-6 fatty acids , vit-C ,vit-E rich diet are usefulas antioxidant for rejuvenation & reduce aging process.
Large number of daily use food components like turmeric ,garlic ,licorice are useful in joints pain disorder.
Conclusion- Low back pain or any joints pain disorder are better treated with other complementory therapies alongwith medicine.
Non pharmacological modalities described above reduce the hazards of medication and also improve the joints flexibility and quality of daily life.

Life style modification like avoid heavy weight lifting , forward bending, longtime continuous standing, travelling on jerky roads on vehicles.
If these modalities are strictly applied in daily routine life then there will be very less chance of occurrence of low back pain and joints disorders. Because--- ``**PREVENTION IS BETTER THAN CURE**``

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A Study on Root of Ashwagandha *(Withania Somnifera* Dunal.)

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Large numbers of plants are utilized in various systems of medicine practiced in India and local health traditions for the treatment of human diseases since time immemorial. Ashwagandha *(Withania somnifera* Dunal. family *Solanaceae*) is a highly esteemed medicinal herb, a popular supplement in Ayurveda and most popularized other common names include the King of Ayurveda. It is also called Indian Ginseng (not at all related to *Panax ginseng*), and Wintercherry. It provides neuro-protection, anti-cancer effects, enhanced virility, and can even stave off anxiety. The herb is classified as *rasayana* in ayurvedic medicine due to being a general tonic and in modern terms it is called an Adaptogen for similar reasons, and is also classified as *bhalya* (Increases strength) and *vajikara* (Aphrodisiac). It is also used for KuÒÔhÁ, DÍpana, PÁcana, VÁjÍkaraÆa, Jwara, RÁjayakÒmÁ, Udara Roga, ArÐa, Kaphaja HikkÁ, KÁsa, Visarpa, ViÒa, Ùrustambha, VÁtavyÁdhi, VÁtaÐoÆita, VÁtaja Roga, ViÒama Jwara, Yoni Roga etc. Morphological and anatomical characters play a vital role in crude drug standardization. However, a proper documentation of *Ashwagandha* is lacking and many times adulterants and sub slandered quality are passed. In present study, the *Ashwagandha roots* have been selected for the standardization due to its medicinal importance.

KEYWORDS: Ashwagandha, Morphological, Standardization, Pharmacognostical, TLC.

Introduction : Indian systems of medicines utilize 80 percent of the material derived from the plants. *Withania somnifera* (family-*solanaceae*) is a highly esteemed medicinal herb in Ayurveda and most popularized as Ashwagandha although other common names include the King of Ayurveda,[1] Indian Ginseng (not at all related to Panax ginseng) and Wintercherry.[2] The herb is classified as *rasayana* in ayurvedic medicine due to being a general tonic and in modern terms it is called an Adaptogen for similar reasons,[3] and is also classified as *bhalya* (Increases strength) and *vajikara* (Aphrodisiac).[4]

The name Ashwagandha comes from the translation 'Smell of Horse', which is thought to be due to two main reasons; the root itself smells like a horse, and the root is supposed to imbibe you with the strength and virility of a horse.[5] It produces KÁmaÐakti like horse in human and its plant bears smell like horse. Beyond those uses, it has been traditional used as an analgesic, astringent, antispasmodic and immune-stimulant while being used to treat inflammation, cancer, stress, fatigue, diabetes and cardiovascular complications [6-7] while its adaptogenic usage is emphazied for persons with stress related insomnia, debility and nervous exhaustion.[8] Ashwagandha has also been reported to be an immune-stimulant compound, with particular emphasis for a stress-related suppression in immunity.[8]

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Ashwagandha is a highly esteemed medicinal plant in traditional Indian medicine for a wide variety of ailments but usually focused on stress, immune support (with regards to stress),

anxiety and depression (again in regards to stress) and the treatment of cancer and inflammation; historically, it boasts low toxicity when consumed as the root extract alongside food.

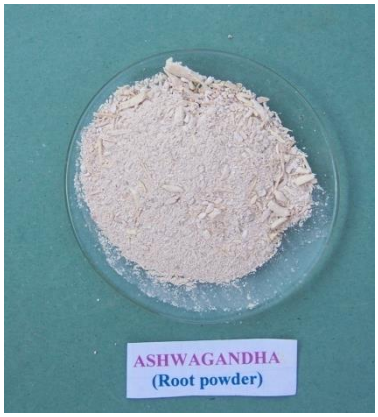
SYNONYMS: Sansakrit - Vajigandha, Hayagandha AÐwagandhÁ, HayÁhvÁ, AÐvÁvarohaka, VÁrÁhakarÆÍ, GokarÆÍ, TuragÍ, VaradÁ, VéÒÁ, BalyÁ, VÁjÍkÁrÍ, PÍtÁ, KañcukÍ. AÐvagandhÁ, VÁjÍgandhÁ, KambukÁÒÔhÁ, VÁrÁhakarÆÍ, TuragÍ, VanajÁ, VÁjinÍ, HayÍ, PuÒÔidÁ, BaladÁ, PuÆyÁ, HayagandhÁ, PÍvarÁ, PalÁÐakarÆÍ, VÁtaghÆÍ, ÏymalÁ, KÁmarÚpiÆÍ, KalapriyakÁrÍ, BalyÁ, GandhapaÔrÍ, HayapéiyÁ and VÁrÁhapaÔrÍ

Assamese - Ashvagandha, Bengali - Ashvagandha ,Gujarati - Asagandha
Hindi - Asagandh, Punir,Kannada - Angarberu,Malayalam - Amukkuram
Marathi - Asagandha, Orriya- Asugandha, Punjabi- Asagand,Tamil - Amukkaramkizangu
Telugu - Pennerugadda, Urdu - Asgand, Nagaori

DESCRIPTION: This species is a short, tender perennial shrub growing 35–75 cm (14–30 in) tall. Tomentose branches extend radially from a central stem. Leaves are dull green, elliptic, usually up to 10 - 12 cm. long. The flowers are small, green and bell-shaped. The ripe fruit is orange-red. The drug consists of dried roots of *Withania somnifera* Dunal (Family - Solanaceae); found in waste land, cultivated field and open grounds throughout India.

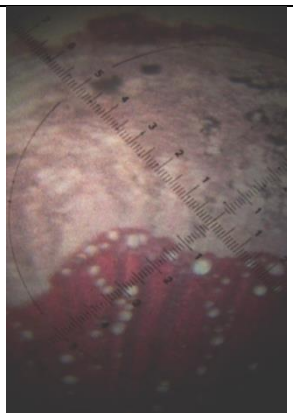
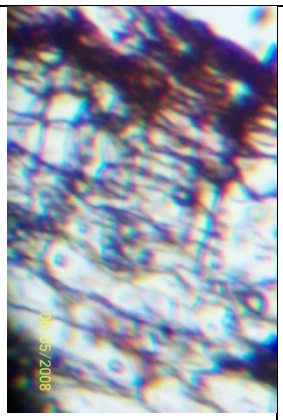
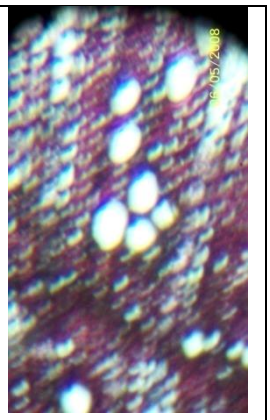
MACROSCOPICAL CHARACTERS

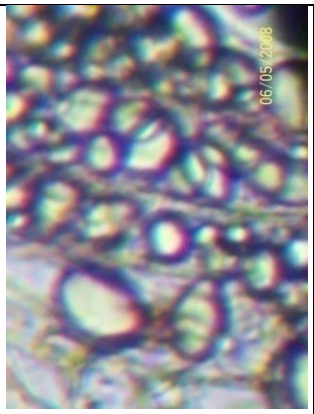
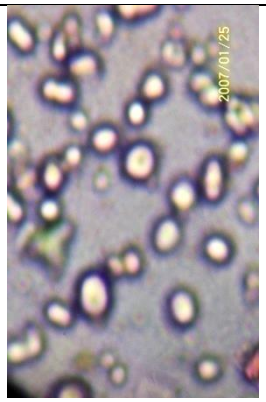
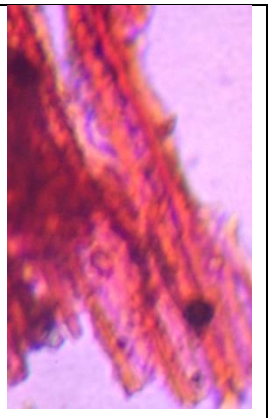
Dry Roots Roots Powder



Roots are straight, unbranched, thickness varying with age, outer surface buff to greyish – yellow with longitudinal wrinkles; fracture short and uneven; odour characteristic; taste bitter and acrid.

MICROSCOPICAL CHARACTERS

			
T.S. Root	**Cork & Phellogen**	**Secondary cortex & Phloem region**	**Inner xylem region**

			
Cells with abundant starch grains	**Crystal and starch grains**	**Pitted vessels**	**Phloem fibres**

T.S. of root shows, cork cells delimited from the outermost layer of the secondary cortex by a single layer of phellogen. Cork cells are large and suberized and contain some starch grains. The phelloderm or secondary cortex consists of 15 to 25 rows of thin-walled rectangular parenchyma cells containing copious starch grains. Internal to secondary cortex is a narrow region of phloem which composed of sieve tubes, companion cells and few medullary ray cells. Xylem is composed of vessels, tracheids and parenchymatous cells. Below the phloem region is secondary xylem or wood region which is composed of scalariform of pitted vessels, tracheids, wood fibers, a large amount of xylem parenchyma and medullary ray cells. The xylem parenchyma cells are rectangular and contain starch grains. Medullary rays are uniseriate or biseriate. Powder microscopy shows abundant starch grains which are generally simple, circular and a few 2 or 3 compounds, trachieds, bordered pitted vessels and lignified phloem fibers.

OBSERVATIONS:

Table 1 - Identity, Purity and Strength

Foreign matter	-	1.0 %
Moisture content	-	3.5 %
Total ash	-	5.8 %
Acid – insoluble ash	-	0.8 %
Sulphated ash	-	7.5 %
Alcohol – soluble extractive	-	7.4 %
Water – soluble extractive	-	15.5 %
pH (10 % of aqueous extract)	-	6.0

Table 2 – Phyto-Chemical Test

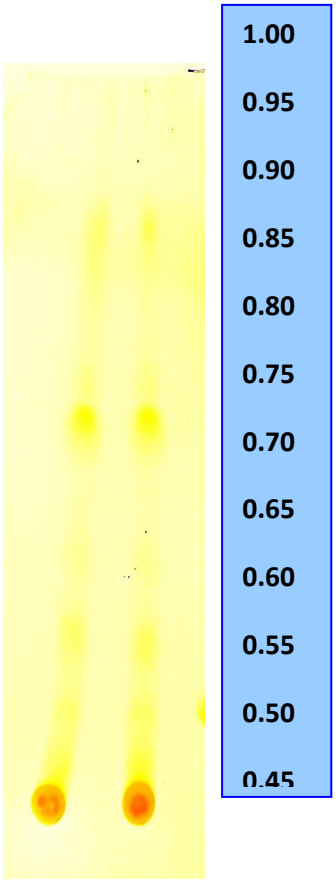
Alkaloids	-	+ve
Flavonoids	-	+ve
Saponins	-	+ve
Steroids	-	+ve

Glycosides - +ve
Reducing sugar - +ve
FLORESCENCE STUDY:
[Chase & Pratt, 1949.,Kokaski, et al.,1958) with some modification]
Table 3 - UV Spectrography

S.NO.	***Treatment***	**Colour produced under ordinary light**	**Colour produced under UV - Long (366nm)**
1.	Drug as such	Cream	Yellow
2.	Drug + Nitrocellulos	Orange	Brown
3.	Drug + Picric acid	Yellow	Light green
4.	Drug + $HCl_{conc.}$	Light brown	Light green
5.	Drug + $H_2SO_{4\ conc.}$	Dark brown	Green
6.	Drug + $HNO_{3\ (50\%)}$	Orange	Bluish green
7.	Drug + 1 N Na OH in Me OH	Light yellow	Yellow
8.	Drug + 1 N Na OH in Me OH + Nitrocellulos	Orange	Yellowish green
9.	Drug + NH_4OH	White	Green
10.	Drug + $FeCl_3$	Light brown	Black
11.	Drug + Acetic acid $_{Glacial}$	Reddish brown	Yellowish brown
12.	Drug + Sudan-III	Buff colour	Brown

THIN LAYER CHROMATOGRAPHY

Figure1 - TLC of Ashwagandha root Visualized in Iodine in ordinary light

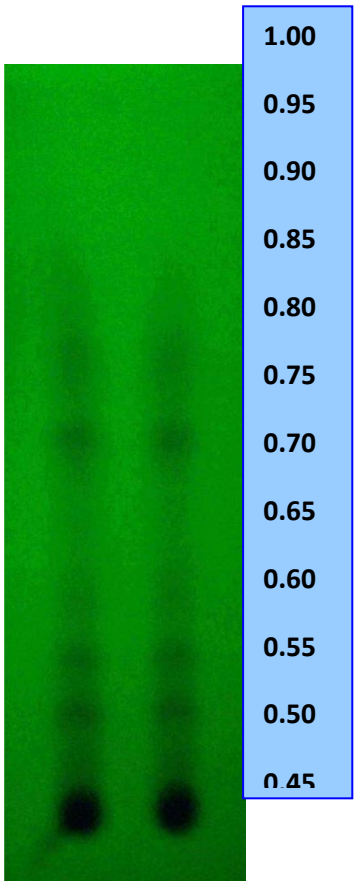


TLC of Ashwagandha root

Visualized in Iodine

Sample preparation	10 % alcoholic extract by cold percolation
Stationary Phase	Precoated Silica gel plate (Merck)
Mobile Phase	Toluene – acetone – Methanol (15: 5: 1)
Rf value of spots visualized in Iodine	0.10, 0.15, 0.20, 0.25, 0.50 & 0.75 (6 spots)

Figure 2 - TLC of Ashwagandha root Visualized in UV Short Wave Length (254 nm)



TLC of Ashwagandha root

UV Short Wave Length (254 nm)

Sample preparation	10 % alcoholic extract by cold percolation
Stationary Phase	Precoated Silica gel plate (Merck)
Mobile Phase	Toluene – Ethyl acetate – Formic acid (7: 3: 1)
Rf value of spots visualized in UV Short Wave Length (254 nm)	0.05, 0.14, 0.20, 0.27, 0.30, 0.50, 0.55 & 0.60 (8 spots)

T.L.C. Methodology: T.L.C. of Ashwagandha obtained by root has been carried out from 10% alcoholic extract by cold percolation method on Silica gel plate (Merck) using in both solvent system as mobile phase Toluene – acetone – Methanol (15: 5: 1) and Toluene : Ethyl acetate : Formic acid (7:3:1) used as a mobile phase. Tulsi oil has been diluted in chloroform-toluene (1: 10). After running distance of 10 cm the plate, plate has been air dried for 15 minutes and then it

has been kept in the oven for 2 to 5 minutes. After cooling of the plate Iodine reagent spray has been done in thoroughly and heated the plate at 110° C for 1-5 minutes. Under observation of both Rf. values of each spots has been calculated.

PROPERTIES AND ACTIONS ACCORDING TO AYURVEDIC TEXT: Rasa : Madhura, Kaṣāya, Tikta, **Guna** : Laghu, Snigdha. , **Virya** : UÒÆa **Vipaka** : Madhura, **Karma** : Rasāyana, VÁjÍkaraÆa, VÁtÁÐÁmaka, Balya.

THERAPEUTIC USES: In Ayurvedic classics it is used for DÍpana, PÁcana, Rasāyana, VÁjÍkaraÆa, Balya, Jwara, RÁjayakÒmÁ, Udara Roga, ArÐa, Kaphaja HikkÁ, KÁsa, Visarpa, ViÒa, Ùrustambha KuÒÔhÁ, VÁtavyÁdhi VÁtaÐoÆita VÁtaja Roga ViÒama Jwara and Yoni Roga etc.

DOSE: Drug powder: 3-6 gm.

IMPORTANT FORMULATIONS: Market available preparations are Aāwagandhā cūrṇa, Aāwagandhādi cūrṇa, Aāwagandhāriṣṭa, Aāwagandhā rasāyana, Aāwagandhā taila etc.

CONSTITUENTS: Ashwagandha roots contains Somniferin, steroidal lactones Withanone, 5,6-epoxy steroidal lactones Withaferin A. steroidal lactones Withanoside IV, Diepoxy variants of the withanolides such as *5β,6β,14α,15α-diepoxy-4β,27-dihydroxy-1-oxowitha-2,24-dienolide,* 12-deoxywithastromonolide, Physagulin, Withanolide glycosides, Ashwagandhanolide, Viscosa lactone B, Catechin,[9] and polysaccharide etc. content in the roots

CONCLUSION: Ashwagandha is an herb and a popular supplement. It provides neuro-protection, anti-cancer effects, enhanced virility and can even stave off anxiety. The results of the present study have established the specifications of the quality profile of the drug Aāwagandhā (*Withania somnifera* Dunal.) plant root. The drug should be standardized before any research and the results should be within specifications.

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Comparative Study of Acupunture and Agnikarma for the Management of Low Back Pain

***Dr. Alok Kumar Srivastava **Dr. D.N. Pande**

ABSTRACT: Acupuncture have been used for pain with various mental and psychosomatic disorders. Acupuncture effectively induce relaxation by affecting the emotional states and evoking pleasant sensations. Gentle manipulation of a fine acupuncture needle could produce a subjective comfortable perception.. The pleasantness of acupuncture treatments has been ignored because it has been assumed that these procedures are nociception

In medical science Agni Karma means application of Agni directly or indirectly with the help of various materials to relieve or cure the patient of disease. A number of instruments are described in various Ayurvedic texts, according to their shape, nature of function, disease in which they are used.Dahanopakarana are various accessories like drugs, articles and substances used to produce therapeutic burns (samyak dagdha) during Agni Karma chikitsa.

For the assessment of pain,the standard scoring system was used.All the patient were assessed before treatment,after treatment and at interval of 1 week.

In my study it was observed that agnikarma is more useful than Acupunture to the patient for the treatment of Kati shool (Low back pain).

KEY WORDS:- Acupuncture, Asi Point, Marma, Agni Karma, Kati shool.

INTRODUCTION: In acupuncture therapy, carefull detection of the acupuncture points and fine needling technique with comfortable subjective sensation are considered important. The role of polymodal receptors (PMR) has been stressedbased on the facts that PMRs are responsive to acupuncture stimuli.

Sushruta has mentioned different methods of management of diseases, such as Bheshaja karma, Kshara Karma, Agni karma, Shastrakarma and Raktamokshana. The approach of Agni karma has been mentioned in the context of diseases like Arsha, Arbuda, Bhagandar, Sira, Snayu, Asthi, Sandhigata Vata Vikaras and Gridhrasi . In Ayurveda, various treatment modalities like Siravedha, Agni karma, Basti Chikitsa and palliative medicines are used successfully. Among these, Agni karma procedure seems to be more effective by providing timely relief. Shalakas for Agni karma made up of different Dhatus like gold, silver, copper, iron, etc. for different stages of the disease condition have been proposed.

AIMS AND OBJECTIVES: The present study has been undertaken to fulfill the following aims and objectives:-

To explore the literature regarding Acupunture and Agnikarma in Ancient and recent text.

To evaluate the importance of Acupunture and Agnikarma.

To establish whether Acupunture or Agnikarma is a suitable conservative treatment for pain management.

To make a Evaluation of Acupunture and Agnikarma for the management of pain.

To reduce the severity and duration of painful condition.

To provide cheap, safe and effective treatment in pain management.

To study associated benefits as well as side effects of Acupunture and Agni karma which are not mentioned in ancient classics?

To standardize an line of treatment which may prove effective in the management of the low back pain?

***SR, Department of Sangyaharan, IMS, **Professor, Department of Sangyaharan**

CLINICAL STUDY:

Clinical study has been carried out on 25 patients in two groups:

Selection of patients: All the patients attending Sangyaharan Vedanahar clinic suffering from Low backace [Kati shool] were selected for this study.

Inclusion criteria: Patients having typical clinical features pertaining to above condition.

Patients willing to undergo trial.

Patients between age group 20-70 years, of either sex.

Exclusion criteria: Patients below 20 years and above 70 years of age.

Patients not willing to undergo trial.

Patient suffering from diabetes mellitus, tubercular arthritis, etc.

Patients of Alpa Satva, Avar satva, Pregnant woman.

Criteria for assessment: Improvement in the patient has been assessed mainly on the basis of relief in the cardinal signs and symptoms. To assess the effect of therapy objectively, all the signs and symptoms were given scoring depending on their severity as below:

Pain

Radiation of pain

Tenderness

Ability to do daily routine work

Change in the range of movement

Pain (Ruja)

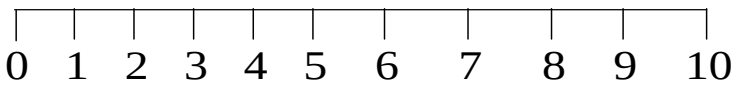
Visual Analogue scale – 0 to 10

0 = **no pain**

1 - 3 = **mild** pain

4 - 7 = **moderate** pain

8 - 10 = **severe** pain



B) Intensity of Pain-mild/moderate/severe

C)

a) No Pain 0

b) No Pain at rest but pain occurs after physical work 1

c) Pain also present at rest but mild 2

d) Pain also present at rest but moderate 3

e) Pain also present at rest but severe 4

2. Pricking sensation (Toda)

a) No pricking sensation 0

b) Occasional pricking sensation 1

c) Constant mild pricking sensation 2

d) Constant moderate pricking sensation 3

e) Constant severe pricking sensation 4

3. Unable to do daily routine work by affected part (Daurbalyata)

a) Can actively do all the routine work 0

b) Can do daily routine work but have to take rest intermittently 1
c) Can do daily routine work but have to take rest very oftenly 2
d) Can't do daily routine work 3

Karnofsky performance scale:

a) Normal activity with no special care 1
b) Unable to work but able to live at home 2
c) Needs hospital care 3

4. Radiation of pain:

a) No radiation of pain 0
b) Pain radiates up to thigh 1
c) Pain radiates up to knee joint 2
d) Pain radiates up to leg 3
e) Pain radiates up to ankle 4
f) Pain radiates up to foot 5

5. Tenderness:

a) No pain on palpation 0
b) Pain occurs on deep palpation 1
c) Pain occurs on light palpation 2
d) Patient does not allow to touch the Affected part 3

Group A & B

In this group the patients were treated with
In A group Acupunture & In B group Agnikarma Therapy in 3 sitting.
Exercise – Simple exercise of affected joint for a few minutes at a time but several times a day.

2. AGE, WEIGHT AND HEIGHT:

Table 1: The statistical comparison of mean age, mean weight and mean height of the patients between the groups.

Group		Age (years) Mean ± SD	Weight (Kg) Mean ± SD	Height (cm) Mean ± SD
Group A (Acupunture)		47.76 ± 11.67	67.16 ± 8.75	162.66 ± 8.73
Group B (Agni karma)		46.15± 12.14	65.55 ± 10.98	156.3 ± 11.56
Comparison between groups unpaired 't' test	t value	t = -0.917	t =-0.39	t = -0.24
	p-value	p > 0.05	P > 0.05	P > 0.05
Remark		NS	NS	NS

It is obvious from the above table that mean age, weight and height are statistically comparable and identical (p > 0.05) in the patients of both the groups.

Table 2: The statistical comparison of visual analogue scale before treatment and after treatment within the group by applying paired t-test, p-values and remarks are as follows:

GROUP		GROUP A	GROUP B
VAS Before Treatment Mean ± SD		6.63 ± 1.41	6.78 ± 0.94
VAS After treatment Mean ± SD		3.59 ± 1.18	2.35 ± 1.17
Comparison within the group	t value	t = 12.11	t = 7.77
	p-value	p < 0.05	P < 0.05
REMARK		S	S

From Table 2 it is observed that changes in visual analogue scale is significant in both groups observed at before treatment vs. after treatment.

Table 3: The statistical comparison of Karnofsky pain scale before treatment and after treatment within the group by applying paired t-test, p-values and remarks are as follows

GROUP		GROUP A	GROUP B
KSKY Before Treatment Mean ± SD		0.63 ± 0.52	0.78 ± 0.43
KSKY After treatment Mean ± SD		0.05 ± 0.23	0.10 ± 0.315
Comparison within the group	t value	t = 3.03	t = 2.33
	p-value	p < 0.05	P < 0.05
REMARK		S	S

From Table 3 it is observed that changes in Karnofsky pain scale is significant in both groups observed at before treatment vs. after treatment.

Table 4: The statistical comparison of pricking scale before treatment and after treatment within the group by applying paired t-test, p-values and remarks are as follows

GROUP		GROUP A	GROUP B
Before Treatment Mean ± SD		1.32 ± 0.59	1.04 ± 0.97
After treatment Mean ± SD		0.34 ± 0.48	0.11 ± 0.32
Comparison within the group	t value	t = 7.57	t = 7.11
	p-value	p < 0.05	P < 0.05
REMARK		S	S

From Table 4 it is observed that changes in Pricking scale is significant in both groups observed at before treatment vs. after treatment.

Table 5: The statistical comparison of radiation of pain scale before treatment and after treatment within the groups by applying paired t-test, p-values and remarks are as follows

GROUP		GROUP A	GROUP B
Before Treatment Mean ± SD		1.68 ± 1.23	1.79 ± 1.93
After treatment Mean ± SD		0.11 ± 0.32	0.05 ± 0.22
Comparison within the group	t value	t = 3.91	t = 5.43
	p-value	p < 0.05	P < 0.05
REMARK		S	S

From Table 5 it is observed that changes in radiation of pain scale is significant in both groups observed at before treatment vs. after treatment.

Table 6: The statistical comparison of tenderness scale before treatment and after treatment within the groups by applying paired t-test, p-values and remarks are as follows

GROUP		GROUP A	GROUP B
Before Treatment Mean ± SD		1.28 ± 0.46	1.04 ± 0.59
After treatment Mean ± SD		0.36 ± 0.50	0.14 ± 0.38
Comparison within the group	t value	t = 5.46	t = 6.16
	p-value	p < 0.05	P < 0.05
REMARK		S	S

From Table 6 it is observed that changes in tenderness scale is significant in both groups observed at before treatment vs. after treatment.

CONCLUSION:

On the basis of the above observations made on patients treated by Acupunture and Agnikarma can be concluded-

The trial procedure Agnikarma and Acupunture has Vedanahar (analgesic) and Shothahar (anti-inflammatory) properties.

Agnikarma and Acupunture is a simple modality of treatment with minimum complication, which can be taken care of easily.

Agnikarma and Acupunture does not produce any significant side effects.

Agnikarma and Acupunture does not alter normal physiology. No significant changes were observed in mean blood pressure, pulse rate, respiratory rate and oxygen saturation during the whole course of the clinical study.

The Agnikarma is more effective as Vedanahar analgesic in long term.

Number of sittings of Acupunture and Agnikarma depends upon the chronicity and severity of disease.

Further, a more detailed study on a large number of samples is required to evaluate biochemical and neurological changes during and after procedure to unfold other properties of Agnikarma and Acupunture.

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APPEAL

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Use of Dashmoolghanvati as Preoperative Medication

Jaiswal, R.K. **Pande, D.N.

Abstract: Relief of anxiety and apprehension is an important goal of preoperative medication(premedicant) in anaesthesia . The primary requirement of safe and satisfactory surgery is to abolish the pain during operation and in post-operative period.

In this clinical study, we selected 100 healthy patients of A.S.A. grade I and II. The patients were divided into two groups. Each group included 50 patients with a narrow age and weight distribution. The patients of group I were pre-medicated with injection glycopyrrolate 0.2 mg I.M. 60 minutes before operation and Tab. Diclofenac sod. (50 mg) orally with an ounce of plain water 90 minutes prior to surgery. Group II were pre-medicated with injection Glycopyrrolate 0.2 mg I.M. 60 minutes before operation and Dashmoolghanvati (1000 mg) orally with one ounce of plain water 90 minutes before operation.On the basis of observation it was concluded that the trial drug is capable to maintain the stability of pulse at all levels of the study. The drugs also do not produce any significant heart rate, blood pressure, respiratory rate and on blood sugar, blood urea and on serum creatinine. Therefore Dashmoolghanvati is safe , anti-inflammatory analgesic and this can be used in preoperative period for Relief of anxiety and apprehension .

Keyword

H.S. = Highly significant P.R.= Pulse rate
S. = Significant Temp= Temperature
N.S = Not-significant $ETCO_2$= End Tidal Carbon dioxide
VAS = Visual Analog Scale MBP = Mean Blood Pressure
SpO_2 = Peripheral Saturation of oxygen

INTRODUCTION: Nowadays 'Sangyaharan' deals very effectively in mitigating different painful conditions including those arising from surgery. Sangyaharan is also trying to prove the efficacy of Ayurvedic principles, procedures and drugs widely accepted for betterment of mankind.

A study of literary materials reveals that people in ancient drugs were quite conversant with enough pain reliving drugs. Sushruta and Charka have mentioned the use of medicated wine (sura) before operation and during the delivery to relieve pain, tension and allaying of apprehension, etc. In present research work the Dashmoolghanvati had been evaluated for its efficacy as an anti-inflammatory analgesic in post operative pain management under Lumbosacral subarachnoid blocks.

MATERIALS AND METHODS: For this research we had selected 100 patients of both sexes with in the age of 18 years to 60 years for lower abdominal surgery under lumbosacral subarachnoid block (LSAB) in two groups having 50 patients in each group. The patients of group 1st were premedicated with Tab. Dilcofenac sodium 50 mg orally at 10 P.M. in the night before surgery and 90 minute before anesthesia and injection Glycopyrrolate 0.2 mg I.M. 60 minute before anaesthesia.The patients of group 2nd were premedicated with two vati of Dashmoolghan satva (1000 mg) orally at 10 P.M. in the night before surgery and 90 minutes before anesthesia and inj. Glycopyrrolate 0.2 mg I.M. 60 minutes before anesthesia.

SELECTION OF PATIENTS: Inclusion criteria

In the present study 100 patients of A.S.A. (American Society of Anaesthesiologists) grade I and grade II, between the age of 18 and 60 years undergoing operation of primary threading, bilateral tubal ligation, Herniorrhaphy, hysterectomy, prostectomy, haemorrhoidectomy were selected for this study from the O.P.D. and I.P.D. of the Department of Shalya Tantra, and Department of Prasuti Tantra, Faculty of Ayurveda, Institute of Medical Sciences, B.H.U.

Exclusion criteria:

The patients with deformities of spinal cord, neurological and mentally disturbed, hepatic diseases, renal disorders, cardiovascular diseases, hypersensitive to local anesthetic, those who were pregnant, those who were outside the age group 18-60 years, those who were outside the A.S.A. grade I and II were excluded.

Anaesthesia

Standard spinal technique with 25 SWG needle at L3-4/L4-5 interspaces in lateral ./sitting position was applied and inj. Bupivacaine 0.5% heavy 2.5 ml was given intrathecally.

Consent

For present study an informed consent was also taken for drug trial. The study was conducted after proper written consent of individual patients explaining the methodology and aim of the study.

Observation

Clinical observation was recorded on a standard proforma.

An assessment of the present clinical trial was done on the following parameters:

Evaluation of psycho-physiological effect on the patient after premedication.

Effect on the course of subsequent anaesthesia.

Observation during immediate post anaesthetic recovery period.

Requirement time of analgesic dose in postoperative period.

OBSERVATIONS AND RESULTS:

1.GROUPING OF PATIENTS AND PREMEDICATION

Table 1. The number of patients and nature of premedication are as follows

Groups	No. of Patients	Premedication
Group I (Control)	50	1.One Tab. of Diclofenac (50 mg) orally with an ounce of plain water on previous night at 10:00 pm and 90 minutes before surgery 2.Inj. Glycopyrrolate 0.2 mg IM 60 minutes before surgery
Group II (Trial)	50	1.Two vati of Dasamoola Ghansatva (1000 mg) orally with an ounce of plain water on previous day at 10 P.M. and 90 minutes before surgery
		2.Inj. Glycopyrrolate 0.2 mg IM 60 minutes before surgery

The above table shows the nature and dose of premedicants and number of patients in each group.

2. AGE AND WEIGHT :

Table 2: The statistical comparison of age and weight between the groups.

Group		Age (years) Mean ± SD	Weight (Kg) Mean ± SD
Group I		38.42 ± 9.35	56.04 ± 6.41
Group II		39.72 ± 8.11	56.04 ± 6.41
Between the group comparison (unpaired 't' test)	t value	t = 0.74	t = 0.02
	p-value	p > 0.05	P > 0.05
Remark		NS	NS

It is obvious from the above table that mean age and mean weight is identical in both the groups statistically.

3DURATION OF ANAESTHESIA AND SURGICAL TIME

Table 3: The statistical comparison of mean of total surgical time and mean of duration of anesthesia time between the group are as follows:

Group		Total surgical time Mean±S.D.	Duration of anesthesia time Mean±S.D.
Group I		61.5 ± 40.6	94.02 ± 24.07
Group II		59.6 ± 31.32	97.50 ± 27.98
Between group comparison (unpaired 't' test)	t value	t = 0.17	t = 0.67
	p-value	p>0.05	p>0.05
Remark		NS	NS

The table 3 shows that the mean total surgical time in group I and group II are 61.5 ± 40.62 and 59.6 ± 31.32 respectively while the duration of anesthesia in group I and II are 94.02 ± 24.07 and 97.50 ± 27.98 respectively.

The table 3 also shows the statistical comparison of total surgical time and duration of anesthesia time between the group are statistically not significant i.e. both the group are identical in nature.

4.REQUIREMENT OF 1st AND 2nd DOSE OF ANALGESIC

Table 4A: The statistical comparison of the mean of first analgesic dose requirement time (min.) and analgesic dose requirement time (min) between the group are as follows:

Group		First Analgesic Requirement time (min.); Mean ± S.D.	Second Analgesic Requirement time (min.); Mean ± S.D.
Group I		204.22 ± 40.27	439.48 ± 66.84
Group II		240.20 ± 33.33	453.28 ± 56.19
Between group comparison (unpaired 't' test)	t value	t = 4.87	t = 5.09
	p-value	p<0.001	p < 0.001
Remark		HS	HS

Table 4B: The statistical comparison of the mean of 1st analgesic requirement time (min) and 2nd analgesic requirement time (min) within the groups (Paired 't'-test)

	Within the group comparison of Analgesic Requirement time (Paired t-test)
	1^{st} dose vs 2^{nd} dose
Group I	213.08 ± 66.01 t=20.82 p<0.001
Remarks	HS
Group II	186.18 ± 65.20 t=20.19 p<0.001
Remarks	HS

The table 4A shows that the 1st analgesic dose requirement time in group I is 204.22 ± 40.27 while in group II it is 240.20 ± 33.33, whereas the 2nd analgesic doses requirement time is 439.48 ± 66.84in group I and 453.28 ± 56.19 in group II.

The table 4A shows that the 1st and 2nd analgesic dose requirement time between the groups are statistically highly significant.

The table 4B shows that statistical comparison of analgesic requirement time within the group 1st dose vs 2nd dose is highly significant.

5.DESIRABLE AND UNDESIRABLE EFFECTS

Table 5a: Desirable effects observed in patients of group I and II.

Desirable effect	**Group I**		**Group II**		**Between the groups comparison Z-test (Proportio-nal test)**
	Frequency	%	Frequency	%	
Sedation					
Present	40	80	45	90	Z=1.40 p>0.05 NS
Absent	10	20	5	10	
Lack of apprehension					
Present	35	70	40	80	Z=1.55 p>0.05 NS
Absent	15	30	10	20	
Lack of anxiety					
Present	40	80	45	90	Z=1.40 p>0.05 NS
Absent	10	20	5	10	

The above table shows the desirable effects in patients of group I and group II after premedication as observed.Sedation is observed 80% in patients of group I and 90% in group II. Lack of apprehension is observed in 70% in group I and 80% in group II. Lack of anxiety is observed 80% in group I while 90% in group II. The above table 5(a) shows desirable effect like sedation, lack of apprehension and lack of excitement between the group comparison are not significant.

Table 5b: Undesirable effects observed in patients of group I and II.

Undesirable effect	Group I		Group II		Between the groups comparison Z-test (Proportional test)
	Frequency	%	Frequency	%	
Dizziness					
Present	0	0	0	0	NS
Absent	50	100	50	100	
Vomiting					
Present	0	0	0	0	NS
Absent	50	100	50	100	
Nausea					
Present	5	10	0	0	Z=2.29
Absent	45	90	50	100	P<0.05 S
Dryness of mouth					
Present	10	20	8	16	Z=0.52
Absent	40	80	42	84	p>0.05 NS

The above table shows the undesirable effects in patients of group I and group II after premedication as observed.Dizziness was absent in both the groups.Vomiting was also absent in both the groups.Nausea was present in 10% patient in group I while it was absent in group II.

Dryness of mouth was present 20% in group I while it was present in 16% in group II. The above table 5(b) shows the undesirable effect like dizziness, vomiting and dryness of mouth between the groups comparison are not significant while nausea is significant.

6. POST ANAESTHETIC SEQUALAE

Table 6: The incidence of post anesthetic sequalae observed in group I and II

Complication	Group I		Group II	
	No	%	No	%
Headache	0	0	0	0
Backache	0	0	0	0
Convulsions	0	0	0	0
Hypersensitivity reaction	0	0	0	0
CNS involvment	0	0	0	0
Retention of urine	0	0	0	0

It is obvious from above table that none of the patients of both the groups show any post-anesthetic sequalae like headache, backache, convulsion etc. during post-anesthetic period. Hence we can say that both the drugs are equally effective and safe even in the post operative recovery period.

CONCLUSION: After observation on 100 patients we concluded that the trial drug is capable to maintain the stability of pulse at all the levels of study.

The drugs do not produce any significant alteration in cardiovascular system during anesthesia and after recovery from anesthesia.

Both the drugs have no respiratory depressant action.

No clinical changes occurs in SpO_2 & $ETCO_2$ during every step of study.

Both the drugs possesses analgesic and anti-inflammatory properties but Dashmool ghanvati possess a little longer duration of action.

Lack of anxiety and lack of apprehension are better in trial group premedicated by Dashmoolghan vati.

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Metabolic Syndrome as Lifestyle Disorder and Dietary Principal for its Management

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Abstract- Metabolic syndrome is a result of modern lifestyle choices: eating the wrong amounts and wrong types of foods, not exercising and having too much stress in life. It is a combination of metabolic disorders, such as dyslipidemia, hypertension, impaired glucose tolerance, compensatory hyperinsulinemia and the tendency to develop fat around the abdomen. Individuals with the metabolic syndrome are at high risk for atherosclerosis and, consequently cardiovascular disease. People suffering from metabolic syndrome may benefit from intensive lifestyle modifications including dietary changes and exercise and adopting a physically more active lifestyle.

Key-words- lifestyle, dietary, hypertension, atherosclerosis and exercise etc.

Today's busy and fast lifestyle often means that we struggle in every steps regarding to keep up with our families and friends, our jobs, and more. Now a day we often forget to take care of ourselves, forgoing exercise, not eating properly and not dealing with stress, all of these factors can create the risk of developing a deadly condition known as metabolic syndrome. Metabolic syndrome is also known as syndrome X, insulin resistance syndrome, or dysmetabolic syndrome.

The metabolic syndrome is a collection of conditions associated with metabolic disorder that increases the risk of developing cardiovascular disease. It is a group of metabolic risk factors which come together in any individual. These metabolic factors included insulin resistance, hypertension , high blood sugar, unhealthy cholesterol levels abdominal fat , cholesterol abnormalities and an increased risk for blood clotting. It affects the individuals who are most often overweight.

Metabolic syndrome is not a disease in itself but having any one of these risk factors isn't good for health, when they're combined, they can create the stage for serious problems. These risk factors can double the risk of blood vessel and heart disease, which can lead to heart attacks and strokes. They can also increase the risk of diabetes by five times.

According to the American Heart Association and the National Heart, Lung, and Blood Institute, there are five risk factors that make up metabolic syndrome.

Large Waist Size- For men: 40 inches or larger , For women: 35 inches or larger

High Triglycerides- Either 150 mg/dL or higher Or Using a cholesterol medicine

3. Cholesterol: Low Good Cholesterol (HDL)- Either For men: Less than 40 mg/dL, For women: Less than 50 mg/dL or Using a cholesterol medicine

4. High Blood Pressure-Either Having blood pressure of 135/85mm Hg or greater or using a high blood pressure medicine

5. Blood Sugar: High Fasting Glucose Level120 mg/dL or higher

Factors influence the metabolic syndrome:

Metabolic syndrome is present in about 5% of people with normal body weight, 22% of those who are overweight and 60% of those considered obese. Adults who continue to gain five or more pounds per year raise their risk of developing metabolic syndrome by up to 45%. There are

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many factors which are responsible for metabolic syndrome, such as-
Obesity itself is the greatest risk factors, including women who are post-menopausal, excess smoking, lack of activity even without weight change.
Metabolic syndrome is associated with fat accumulation in the liver, resulting in inflammation and the potential for cirrhosis.
Other problems associated with metabolic syndrome include obstructive sleep polycystic ovary syndrome, increased risk of dementia with aging and cognitive decline in the elderly.
Medical conditions, genetics and the environment also play important roles in the development of the metabolic syndrome.
Genetic factors influence each individual component of the syndrome, and the syndrome itself. A family history that includes type 2 diabetes, hypertension and early heart disease greatly increases the chance that an individual will develop the metabolic syndrome.
Environmental issues such as low activity level, sedentary lifestyle, and progressive weight gain, eating an excessively high carbohydrate diet also contribute significantly to the risk of developing the metabolic syndrome.

Dietary management for Metabolic Syndrome:

Prevention of Metabolic Syndrome is to lose excess weight with regular exercise and a little bit change in diet. Diet will play a significant role in health. By making small changes in diet it can be prevented.Early eating in the morning- Breakfast should be taken after sometimes in early morning. Fruits, skim milk, wheat or other whole grain cereals with 3 to 5 grams of fiber can be added in diet.Eat in small quantity- Small amount of foods are more frequently instead of eating 1 or 2 large meals a day, have a small meal or snack every 3 to 4 hours. This can be beneficial to maintain energy and optimal nutrient levels. Infrequent eating can cause the body to go into a "stress mode" between meals.Include Fiber rich Diet- Dietary fiber is the part of a plant which is not digested by the stomach or small intestine. A high fiber diet contains foods that have a lot of fiber. It is the part of fruits, vegetables, and grains that is not broken down in body. A high fiber diet will add bulk and softness to bowel movements. This diet may help to reduce in constipation, high cholesterol and diabetes. Rich fiber diet are raw apple and pear with skin, almonds, dates, orange, apricot, banana, pear, potato and more unprocessed fruits, whole grains, nuts, and vegetables should be included in diet. Vegetables from the cabbage family are a good source of fiber. These fiber-rich foods make feel fuller longer.
Add More Fruits & Vegetables- Fresh fruits and vegetables should be added more in diet .They are full of carotenoids, which help to protect against cancer and the metabolic syndrome. Serving size is 1/2 a cup of fruits and vegetables, 1 cup of leafy vegetables, 1/4 cup of dried fruit, and 6 ounces of fruit or vegetables juice. Fresh fruits and vegetables should be chosen because processing foods removes nutrients and usually adds unhealthy preservatives.
Fat free diet-Our body needs to consume fat in order to work properly. Fat is a major source of energy and helps our body to absorb vitamins. It is also important for proper growth, and for keeping healthy. A completely fat-free diet would not be healthy but it is important that fat be consumed in moderation. The main types of “healthy” fats are monounsaturated and polyunsaturated and “unhealthy” fats are saturated and trans fat.Fat comes from a variety of food groups, particularly the milk, meat, and oils food groups. It can also be found in many fried foods, baked goods, and pre-packaged food.

Saturated fats- Saturated Fats are mainly found in foods that come from animals such as meat and dairy, but they can also be found in most fried foods and some prepackaged foods. Saturated fats are unhealthy because they increase LDL "bad" cholesterol levels in body and increase the risk for heart disease.

Many saturated fats are "solid" fats such as the fat in meat. Other sources of saturated fats include: High-fat cheeses, high-fat cuts of meat, whole-fat milk, cream, butter Ice cream and ice cream products, Palm and coconut oils .

Unsaturated Fats- Olive oil or other unsaturated fats, such as canola oil should be used, vegetable fats such as butter, should be avoided. The fats that consume should be primarily in the form of unsaturated fats.

Monounsaturated Fats- Monounsaturated fats are extremely healthy; include olive and canola oils, and nuts. Most nuts are monounsaturated and healthy, but high in calories, so they should be eaten in moderation.

Omega-3 & Omega-6 Fats- Omega-3 fatty acids are an especially heart healthy fat and can help with lowering high triglyceride values in blood. Omega-3 fats can be found in: Fish,salmon and other soybean products, Walnuts, Flaxseed and flaxseed oil Canola oil. Examples of omega-6 sources include corn oil, safflower oil, sunflower oil, and cotton seed oil and soybean oil-all good choices to help avoid the metabolic syndrome.

Animal Fats & Meat- Avoid or reduce the consumption of animal fats and meat .The leanest cuts meat should be chosen with no fat and skin on it.

Avoid Fried & Processed Foods- Always avoids fried foods and barbequed foods because they are high in calories, containing unhealthy fats and preservatives and have few nutrients.

Sautéed Foods- Sautéed foods cooked simply in soy or olive oil are a better choice, but avoid using a lot of oil.

Drinks- Drink lots of water. Sodas and most fruit juices should be avoided, because they contain high sugar and no fiber. Eating the whole fruit is much better option.

Focuses on foods that are low in calorie density and naturally high in fiber and nutrients, including whole-grain foods like hot cereals, corn, whole-wheat pasta, and brown rice; generous amounts of fruits, vegetables.

Importance of Exercise & Stress Management

Exercise and stress management are crucial part of the metabolic syndrome. Exercising regularly for twenty minutes at least four times a week is critical in reducing visceral fat, which will helpful to reduce the risk for developing metabolic syndrome. Low stress is also highly beneficial in relieving and preventing metabolic syndrome. Incorporating healthy lifestyle habits is essential to preventing it. Those already diagnosed with Metabolic Syndrome can dramatically reduce their risks of developing heart disease and diabetes.

Losing only 5%-7% of body weight can help reduce insulin levels, which in turn reduces the risk of Metabolic Syndrome and Diabetes. Exercise improves blood flow and strengthens the heart, helping ward off heart disease and stroke. Overall cardiovascular fitness is very important for weight control, blood flow and heart health, but fat loss and muscle gain play a greater role in reducing the symptoms associated with Metabolic Syndrome.

Conclusion: Similar to other chronic diseases the metabolic syndrome is also a complex and a result of busy lifestyle including eating the wrong amounts and wrong types of foods, not exercising and having too much stress in life. Manifested by a series of events related to abdominal fat and body inflammation, metabolic syndrome can create a high risk for developing one or more of the conditions including diabetes, hypertension, heart disease, blood vessel disease stroke and leg amputations, some cancers, dementia, irritable bowel syndrome and many forms of bodily inflammation. Metabolic syndrome can prevent by using lifestyle modification. Weight reduction requires including healthy diet and exercise is must. A lot of fresh vegetables and fruits should be added in diet. Fast foods, fried foods, fatty foods and oily foods should be avoided.

Smoking cessation is an important component of treatment, and sometimes medications may be useful. However a healthy diet and regular exercise is very beneficial for it.

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Effect of *Haritaki Lepa* in the management of hyperpigmented scar

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ABSTRACT : Hyperpigmented scar is the sequele of most of the wounds. The occurance of hyperpigmented scar has equal distribution in either sex and incidence is highest in second to third decade. . In case of delayed healing, it is more likely to be local than general which simplifies the importance of the difficulty of study.It is a cosmetic problem, there is no any economical & safe treatment available. *Acharya Sushruta* has suggested treatment for the scar as *Pandukarma* in sixteen *vranoupakramas*.*Chebulic myrobalan (Haritaki)* was freely available in our area. In *pandukarma, Haritaki (Chebulic myrobalan) lepa* applied on scar site.100 patients were selected and divided in two groups GroupA(*Haritaki* with Goat's milk) , GroupB(*Haritaki lepa*).Treatment was given for 28 days ,the results found are quite satisfactory.Due to *vranakar karma* of *Haritaki* Scar size and colour were improved.

Keywords :-Hyperpigmented , Pandukarma, Haritaki, vranaropana.

INTRODUCTION:*Sushruta* is the father of surgery whose knowledge of clinical material and the principles of management are considered to be true in this era.He classified traumatic wounds in *Shuddha Vrana*, *Nadi Vrana*, *Sadhya Vrana*, *Dagdha Vrana* and also explained their stepwise evaluation and treatment in the form of sixty *upakramas* which are from *Apatarpana* to *Rakshavidhana*, resolve on primary suturing in clean wounds prevention of sepsis are outstanding for their current point of view. The study of *Shalya Chikitsa* brings out obviously that *Vrana* (wound) is the most momentous surgical thing and the acquaintance of its effective management for a surgeon is the basic obligatory skill on which the conclusion of surgery turns.

Wound healing, a complex and dynamic interactive process, is divided into 3 overlapping phases: inflammation, tissue formation, and tissue remodeling . Cutaneous scars from surgical wound can result in normal asymptomatic scars to cosmetically unacceptable scars . Scars are not only a cosmetic concern but they can also cause pain, itching, discomfort, contracture, and other functional impairment. Several well-proven interventions are available for scar treatment including intralesional steroid injection, surgical excision, cryotherapy, radiotherapy, dermabrasion, pulse dye, and carbon dioxide laser therapy. These treatments have variable success and require multiple therapeutic sessions. Therefore, prevention and early recognition of hypertrophic scars and keloids are essential in their management. Among preventive treatments available, *Haritaki churna* with goat's milk *lepa* to improve the appearance and texture of surgical hypertrophic scars.

Haritaki is the plant simply accessible in the Indian subcontinent. It has seven types, among these *Rohini*, which is said to be *Varnakar* action which is used in this study. It was observed that patients scar size reduces than improvent of scar colour.

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1. Prospective open labelled randomized controlled clinical trial
2. Screening of patients for inc
3. Group allocation by randomization:Trial group Control group
4. Haritaki with Goat's milk Lepa Haritaki lepa for 28 days

Follow up 0,7th ,14th , 21th, 28th day pain score

On MSS scale &Scar Size Observation

Statistical analysis Disscussion & Conclusion

MATERIAL & METHOD: Total of 100 patients were selected for this study and divided in 2 groups.
Group A(Experimental group): *Haritaki lepa* with goat milk was applied on the scar daily according to size for 28 days.
Group B(Control group): *Haritaki lepa* was applied on the scar daily for 28 days.
The clinical study had been conducted in the out patients department department of *shalyatantra* .The patient of either sex were randomly selected of age group 16 to 65 yrs .The detail history of each patient was recorded in the performa which is specially prepared for the purpose and all the factors were filled up on first day of examination as well as on the days of successive periodic visits.Lepa application was done on each day and patient was called in for follow up for every 7 days. Thus, treatment was given for one month and assessment was done on 0, 7, 14, 21, 28th day of treatment.
CRITERIA FOR SELECTION OF PATIENT :
Hyper pigmented scars.
Patients of either sex
Age group between 16-60 yrs.
CRITERIA FOR REJECTION OF PATIENT:
Keloid scar
Scar after severally burn
Vitiligo
Patients suffering from malignancy
Seriously ill patients of any other skin disease.
MATERIALS :-Instruments and other
1. *Haritaki phal* 2. Goat's milk 3. Gauze piece 4. Cotton pads 5. Bowls, bottles
6. Transparent paper 7. Graph paper
Drug:
Haritaki phal :According to *Rajnighantu, haritaki* is divided in seven types by means of their fruits ,from these *Rohini* is round in shape, used in *vranakarma* , found mostly in our area.Usually, *Haritaki* is used as *anulomak karma*.,but in my study *rohini* is used.
Goat's milk :- collected from local area.
METHOD:
Haritaki fruits was placed in the goats milk for 7 days and milk was changed every day .After that, these fruits was dried in shadow & grinded into fine powder. The selected patient was taken on the examination table, In the appropriate position .Graphical measurement of the lesions was done whenever possible.

As per random selection in the Group A (Experimental group): *Haritaki lepa* with goat milk was applied on the scar daily according to size for 28 days. *Lepa* applied in 2-3 mm thickness.It was to be kept till it dried and later washed with warm water.Patient was called for next follow up after every seven days upto 28 days.

GroupB Control group: *Haritaki lepa* was applied on the scar daily for 28 days in the same manner.Findings were noted on 0, 7, 14, 21, 28th day of treatment.After 28 days a complete assessment was done. Residual symptoms were noted.

PARAMETERS:-

CRITERIA FOR ASSESSMENT:

Manchester scar scale:

Scar colour:

Perfect: normal healthy colour with no scar mark.

Slight: marked pink yellow colour with 3 or less scar marks.

Obvious: multiple scar marks with normal skin colour.

Poor: no change in scar colour.

Size of scar:

Size of scar was measured by using transparent graph paper.

Follow Up:-0,7,14,21 and 28 th day follow up were taken.

Standardization Of Haritaki Churna:Result of analysis:-

1Moisture - 6.40% 2.Specific Gravity - 1.153

3Total Ash - 3.30% 4.Acid Insoluble ash - 0.29%

OBSERVATION :

Data thus generated was assessed and arranged into tabular form and represented statistically.

DIAGNOSIS wise distribution of 100 patients of Scar :-

DIAGNOSIS	Trial Group		Control Group		TOTAL
	No.of Pts.	%	No.of Pts.	%	
After CLW Suturing	20	40%	19	38%	39
After infected wound	12	24%	10	20%	22
After postoperative wound	18	36%	21	42%	39
TOTAL	50	100%	50	100%	100

X=0.4382 P>0.05

To assess the result of the study both objective and subjective findings were recorded before ,during and after completion of the treatment. The most leading clinical features of hyperpigmented scar was taken as subjective for analysis i.e.scar colour according to manchestar scar scale. Objective parameter was taken as scar size from 5 to 12 cm.As the sample size was more than 30 patients i.e. 50.so paired Z test was applied to know the significance of subjective parameter converting into quantitative data and scar size as quantitative . For qualitative data i.e. scar colour grading according to Manchestar scar scale Chisquare test was applied. The level of significance was set at 5% (p=0.05).

Table showing the difference between two followups in scar size Group A (trial Group)

Difference obs. Days	Mean	SD	SE	Z	P
0-7 days	0.9600	0.4499	0.06363	2.34	P<0.05
7-14 days	1.140	0.6392	0.09040	2.62	P<0.05
14-21 days	1.2	0.6389	0.09035	2.87	P<0.05
21-28 days	1.66	0.7722	0.1092	4.191	P<0.05
BT-AT	4.920	1.275	0.1803	12.63	P<0.05

Group B Control Group

Difference obs. Days	Mean	SD	SE	Z	P
0-7 days	0.9200	0.3959	0.05599	2.30	P<0.05
7-14 days	1.040	0.6376	0.09017	2.49	P<0.05
14-21 days	1.26	0.6328	0.08949	3.01	P<0.05
21-28 days	1.480	0.6465	0.09143	3.68	P<0.05
BT-AT	4.700	1.329	0.1879	11.71	P<0.05

Table showing effect of treatment on scar colour according to grading of manchestar scar scale in control group by chisquare test.

Grades	BT	AT
1	0	1
2	7	17
3	18	23
4	25	9

X^2= 13.31 P<0.05

Table showing effect of treatment on scar colour according to grading of Manchestar scar scale in trial group by chisquare test.

Grades	BT	AT
1	0	6
2	7	26
3	20	12
4	23	6

X^2= 28.90 P<0.05

Table showing effect of treatment on scar colour according to grading of Manchestar scar scale at after treatment by comparing trial vs control group at last follow up.

Grades	AT(CONTROL)	AT(TRIAL)
1	1	6
2	17	26
3	23	12
4	9	6

X^2= 9.512 P<0.05

The above table shows the effect of treatment on scar colour in control and Trial group by chisquare test. The effect of treatment on scar colour according to manchestar scar scale in both groups is statistically significant, but more significant in Trial group. More cured patients are observed in Trial group i.e.6 patients and 1 patient in Control group .

Table showing improvement in no.of patients on scar size :-

EFFECT OF TREATMENT	Trial Group		Control Group		Total
	No.of pt.	%	No.of pt.	%	
Uncured(more than 4Cmsq.)	10	20%	12	24%	22
Partial cured(size2-4Cmsq.)	18	36%	21	42%	39
Cured(size0-2Cmsq.)	22	44%	17	34%	29
Total	50	100%	50	100%	100
X^2=1.054 P>0.05					

DISCUSSION:-

Vrana implies damage of the part leading to discolorations –hence the term *Vrana*. It is better understood in terms of discontinuity of skin, muscles, mucus membrane etc. *Vranachinha* forms after abnormal *ropana* and *vrana lekhana.* Though no specific *Samprapti* regarding *Vrana* exists in any *Ayurvedic* text an attempt is made here to checkout a specific Pathogenesis of the disease *Vranachinha.*

Samprapti Ghataka:

Dosha : Tridoshaja Dusya : Twaka, Mansa.
Srotas : Raktavaha, Mansavaha, Svedavaha. Agni : Mandya, Vishama.
Marga : Shakha. Adhisthana : As *Dushya.*

Although scar formation commences long time wound healing, has been well elaborated by the modern pathologist and surgeon in the light of resent research.Though the symptom of *Vranachinha* is discolouration in general, specific sign and symptoms are characterized according to the manifestation of *Samprapti*. As far as the management of scar is concerned appropriate *Savarnikarna* i.e.*pandukarma* and *krishnakarma* has to be done. By the virtue of Lakshana, *savarnikarna* properties of Rohini phala, the local Dhatu Dusti is ceased. The second step in the path of scar removal is to enhance, for this purpose Goat's milk made easy way. With the help of "*Prinana*" and "*savarnikarna*" action of trial drug i.e. *haritaki* acted as promoter on rate of

contraction. *Rohini phala* with Goat's milk contain *Varnya* properties which is helpful to enhance the local appearance of the wound.

CONCLUSION:

It was noticed that maximum 44% of cured cases were observed in trial group i.e. *haritaki lepa* with goat's milk followed by 34% in control group i.e. *haritaki lepa*. Whereas highest percentage, 64% of partially improved cases in *haritaki lepa* Control group. More improved cases were also reported in *haritaki* with goat's milk lepa trial group. 21% cases noticed unchanged in trial group, 14% cases unchanged in control group. from the studies made both control & experimental cases, it can be speculated that, the drugs namely "*haritaki* with goat's milk *lepa*" posses sufficient efficacy in "*Savarnikarna*" without producing any adverse effects. The drug preparation shown better effect in clinical studies and also reduces scar size sufficiently than scar colour. Hence, this study goes to show that application of *haritaki* with goat's milk is quite superior to plane *haritaki lepa* in faster scar removal.

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Advancement In Treatment of Fistula in Ano (Bhagander) Versus Ksharsutra Therapy

Gupta Rashmi * Gupta Gopal Das ** Singh Lakshman ***

ABSTRACT: The anal fistula in ano has been a common surgical problem reported from ancient time.Fistula in ano is not life threatening but caused discomfort and pain to the patient which create problem in routine work.***Shshruta***(1500-1000 BC) had explained fistula in ano (*Bhagandar*) in detail at NidanSthan fifth chapter and chikitsasthanawith surgical and parasurgical management. *Ksharsutra*is used for the management of *bhagandara*(fistula in ano) and nadivrana. In modern science many surgical procedures available for the treatment of fistula in ano butthe results of these procedures are not very satisfactory especially for the treatment of complex and recurrent fistula in ano. It leads to complication like recurrence, incontinence, delayed healing with psychological discomfort to the patients.

Ksharsutra therapy is an old, simple and safe minimum invasive surgical procedure for treatment of fistula in ano described in ancient classics of Ayurveda. Ksharsutra therapy is a primary method of treatment in all types of fistula in ano (*Bhagander*) including complex& recurrent fistula with high success rate.

KEYWORDS- Fistula in ano, *Bhagander, Ksharsutra* therapy,

INTRODUCTION-

The vast majority of fistulae in ano are secondary to infection of the anal gland which present as perianal abscess which may spontaneously burst or adequately drained.[1] Fistulae in ano may be found in association with specific diseases as crohn's disease, malignancy, radiation, trauma, foreign bodies or specific infections as tuberculosis, actinomycosisor Chlamydia[(3)].Fistulae in anoare classified according to the relationship of the tract to thesphincters, thedefinition of high or low fistulae describes the height of the tract as it traverses the sphincter muscles and not the position of the internal opening which is almost without exception at the dentate line.[(1, 2)]

Fistula in ano is an surgical disease, not cure by medical treatment except tubercular fistula which is respond by antitubercular treatment followed by surgical intervention.

The main objective of management of fistula is the cure of the disease, preserving the anal sphincter, preventing recurrence and allowing an early return to normal activity of the patient.

Recurrence and incontinence is the major problem in surgical treatment of fistulae which can worse the previous condition. In modern science available methods of treatment like lay-open technique(Fistulotomy), seton,fistulectomy,endorectal advancement flap,fibrin glue,bioprosthetic fistula plug, ligation of intersphincteric fistula tract (LIFT), VAAFT etc.

LAY-OPEN TECHNIQUE (FISTULOTOMY)-For the treatment of simple intersphincteric and low transsphincteric fistulas, the patient is placed in the lithotomy position. A probe is inserted from the external opening along the tract to the internal opening at the dentate line. The tissue overlying the probe is incised and the granulation tissue curetted and sent for pathologic evaluation.

SETON- A seton may be any foreignsubstance that can be inserted into the fistula tract to encircle the sphincter muscles. Materials frequently used include silk or other nonabsorbable suture material, Penrose drains, rubber bands, vessel loops, and silastic catheters. The lower portion of the internal sphincter is divided along with the skin to reach the external opening and a nonabsorbable suture or elastic suture is inserted into the fistulous tract. The ends of the suture or elastic are tied with multiple knots to create a handle for manipulation. This form of Seton, known as a cutting Seton, is tightened at regular intervals to slowly cut through the sphincter. This allows the tract to become more superficial, converting a high fistula into a low one.

FISTULECTOMY- Although excision of the fistula or fistulectomy was thought to be a satisfactory method of treatment of fistula-in-ano, its use is no longer recommended. Larger wounds are created significantly prolonging wound healing time. A greater separation of muscle ends occurs1 and there is greater risk ofinjuring or excising underlying muscle thereby increasing the risk of incontinence.

ENDORECALADVANCEMENT FLAP- When the traditional laying-open technique may be inappropriate, for example, in anterior fistulas in women, in patients with inflammatory bowel disease, in patients with high transsphincteric and suprasphincteric fistulas, as well as in those with previous multiple sphincter operations, multipleand complex fistulas, the use of an anorectal advancement flap has been advocated[8]. Advantages of this technique include a reduction in the duration of healing, reduced associated discomfort, lack of deformity to the anal canal, as well as little potential additional damage to the sphincter muscles because no muscle is divided. Successful results have reported in more than 90% of patients.[4] Factors associated with poor outcomes include Crohn's disease and steroids.[5]

FIBRIN GLUE- The use of fibrin glue as a primary treatment alone or in combination with an advancement flap has come into vogue. This treatment modality is appealing because it is a noninvasive approach that avoids the risk of incontinence associated with fistulotomy. In the case of failure, it may be repeated severaltimes without jeopardizing continence.

BIOPROSTHETIC FISTULA PLUG- Recently, the use of a bio prosthetic plug made from lyophilized porcine intestinal sub mucosal has been described for complex anal fistulas.[6] This porcine fistula plug (Surgisis anal fistula plug) is commercially available from Cook Surgical Inc, Bloomington, IN. Following rehydration of the plug, the following technique is used.

LIFT-(LIGATION OF INTERSPHINCTERIC FISTULA TRACT)--This technique has been given good results for treating anal fistula but this is limited to uncomplicated transphinteric and intersphinteric fistula. The success rate is considered from 57%-94% with minimal morbidity and little or no impact on continence status.[7, 8]

COMLICATIONS---Incontinence: Minor disorders of continence after fistulotomy have been reported to range from 18% to 52% whereas soiling and insufficiency have been reported in as many as 35% to 45%[9]. The occurrence of continence disorders has been found to be related to the complexity of the fistula and to the level and location of the internal opening. Patients with complicated fistulas, high openings, posterior openings, and fistula extensions have been found to be at higher risk.

Although excellent results using a seton have beenreported,[10] its use does not protect against the development of impaired continence. Major fecal incontinence was reported in 6.7% after a review of several series[11.] Excellent results with respect to continence have been reported with the use of the advancement flap although recent reports have observed disturbances in continence in 9%–35%.[12,13]

Recurrence:

Recurrence rates after fistulotomy range from 0% to 18%.[13] Causes include failure to identify a primary opening or recognize lateral or upward extensions of a fistula.[13] spontaneous closure of the primary opening, or a microscopic opening. The presence of secondary tracts which can be easily missed accounted for early recurrence in 20%.

Recurrence rates after staged repairs using a seton rangefrom 0% to 29%. Although recurrence rates after anorectal advancement flaps were initially reported to be low, with long-term follow-up, recurrence rates of 40% have been reported. Recurrence can be minimized provided that care has been taken to avoid necrosis or retraction of the flap. The use of full-thickness rectal wall has been advocated to prevent ischemic necrosis of the flap.

Early postoperative complications that have been reportedafter fistula surgery include urinary retention, hemorrhage, fecal impaction, and thrombosed external hemorrhoids, which were found to occur in less than 6% of cases. Later complications such as pain, bleeding, pruritus, and poor wound healing have been reported in 9% of patients.

KSHARASUTRA&KSHARA SUTRA THERAPY

Great Indian Surgeon Sushruta narrated in his teachings the use of Kshara for cure of fistula in ano.Surgical technique for treatment of fistula in ano described in ancient classics of Ayurveda is being practiced as a primary method of treatment in all types of fistula in ano including complex and recurrent fistula at Banaras Hindu University since 1965 with great success rate. Ksharsutra is a unique medicated seton helps in both cutting as well as drainage of fistulous tract. A modified technique of ksharasutra therapy called IFTAK (interception of fistulous tract with application of ksharasutra) is adopted by Prof. Manoranjan Sahu, Department of Shalya Tantra, Banaras Hindu University, since 2007 for treatment of complex and recurrent fistula in ano.

In this technique interception of proximal part of fistulous tract is done at intersphinteric plane along with application of Ksharsutra from site of interception to the infected crypt in anal canal. This technique is aimed to eradicate the infected anal crypt without damage to anal sphincters by using Ksharsutra. This technique make surgical approach to managing the fistula in ano easy by converting the complex nature of fistula in ano to a simple one, reduce the duration of time to complete cure of fistula, allowing an early return to normal activity for the patient. It is being observed that complete cure of complex fistula in ano with a highest success rate and almost negligible recurrent rate.96% of the cases had complete cure while 4% had recurrence after treatment with K.S[14,15].

CONCLUSION-Ksharasutra appears to be the best option for the management of high anal fistula and recurrent fistula where there were no post treatment major incontinence and least recurrence rate(5 percent). Modified technique of Ksharasutra therapy i.e. IFTAK (Inteception of Fistulous tract with application of Ksharasutra) is better technique than other surgical procedure for the management of complex and recurrent fistula in ano.

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Fluroscopy guided Radiofrequency Thermocoagulation of Ganglion Impar in the Management of Coccydynia: Prospective studies

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Abstract: **Aim:** To determine the efficacy of Fluroscopy guided ganglion impar block by radiofrequency thermocoagulatios in the management of coccydynia (coccyx pain).

Method: Those patients who are unresponsive to conservative treatment 12 patients were prospectively analysed for ganglion impar block by radiofrequency thermocoagulation under guide of fluoroscopy. The patients were followed up VAS for a period of 6-months.

Result: Out of 12 patients, 9 patients had excellent relief of pain and VAS was 75-100%, 2 patients had good pain relief, VAS: 51-74% and one patient had poor pain relief, VAS: <50% on the follow-up intervals up to 6 months. At the end of the 6-month follow-up period the average VAS score pre-procedure was 8 (range 6–10) and had decreased to 2.

Conclusions :Patients with coccydynia should be managed conservatively when possible. Treatment should include NSAIDs, soft cushion and physical therapy. Radiofrequency ablation can offer reasonable results for patients failing conservative treatment without any adverse complications.

Key-words: Coccyxdynia; Fluroscopy: Radiofrequency Thermocoagulation;

Introduction: This is a painful condition of the coccyx of the spine usually resulting from direct trauma, childbirth or unknown cause. Women are affected more frequently than men.[1-2]

1Patients commonly felt discomfort in the sitting position and when rising from the sitting position. It may be partially responsible for the symptoms of coccydynia is due to stretching of the ligamentous structures of the first intercoccygeal joint. The caudal end of each sympathetic trunk is situated in front of the sacrum, medial to the anterior sacral foramina. It consists of four or five small sacral ganglia, connected together by interganglionic cords,and continuous above with the abdominal portion. Below,the two pelvic sympathetic trunks converge, and finish at the front of the coccyx in a small ganglion, the ganglion impar. It is a relatively rare condition that usually responds well to anti-inflammatory drugs. Chemical neurolysis and cryoablation are also used in the treatment of coccydynia. [3-4] Destruction of ganglion impar using radiofrequency lesioning is another

option . In this study, we aimed to evaluate the effectiveness of radiofrequency thermocoagulation (RFT) of ganglion impar in patients with chronic coccydynia .

METHODS: This study was conducted at a Pain divsion ,department of Anesthesia, institute of medical science ,BHU, Varanasi, India in the year of 2014-15 . The patients were first treated with conservative management, including medications and/ or physical therapy. When conservative treatment proved unsuccessful, they were recommended treatment of radiofrequency thermocoagulation (RFT)of gangalion impar. 12 patients who were treated with RFT of ganglion impar for chronic coccydynia were enrolled in this study. All patients signed an informed consent before the procedure. Patients with pilonidal cysts, radicular symptoms and rectal, gynaecologic and pelvic disorders were excluded from study .There were 4 males and 8 females with age range of 30 to 65 year. A history of a fall involving direct trauma to the coccygeal area was present in 4 male patients and etiology was unknown in rest of 8 female patients .MRI investigations of Lumbar and sacral of the spine were helpful to evaluate if the pain was referred from a more proximal spinal segment or another accompanying soft tissue pathology. Before procedure all the patients were asked to empty bladder and rectum to facilitate needle placement and avoid

inadvertent injection. The procedures were performed in the operation theatre equipped with a planar fluoroscope (Siemens) while the patients were prone A 10-cm long, 22-gauge radiofrequency needle with 2 mm active tip was directed to the sacrococcygeal junction or first intercoccygeal junction under the guidance of C-arm fluoroscope. The needle was advanced through the junction until the tip was placed just anterior to the first intercoccygeal or sacrococcygeal junction. The position of the needle tip was confirmed by injecting 1ml of radio-opaque dye into the retroperitoneal space. The spread of the dye gives a "reverse comma" appearance in the lateral view. When the electrode positioning was confirmed, the electrical stimulation was performed and the patient was asked to define any pain. The denervation process started after the patients confirmed the pain was like the original pain .The patients were asked to tell any discomfort feelings during the procedure so that we could stop. Radiofrequency lesioning was performed at 850°C for 150 seconds. After that a mixture of 40 mg triamcinolone and 3 ml of 0.25% bupivacaine was injected. The patients were given no extra medication after the procedure and they were discharged from the hospital within 2-3 Hrs of post procedure.

All the patients were sent a questionnaire and followed up by telephone at a time-interval of 1 month, 3 months, and 6 months from the day of radiofrequency ablation. Patients were asked to grade their pain on a before and after the procedure. The patients enrolled in the study were asked to

define their pain using a visual analogue scale (VAS) ranging from 0 to 10 (0 represents no pain and 10 represents the worst pain imaginable) before and after the procedure and at their follow up visits.

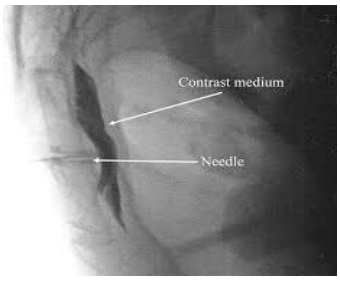

Fig.1: Needle placement through intercoccygeal junction. Contrast distribution confined to the anterior of the
Coccyx and sacrum covering the location of ganglion impar.

Results: Twelve patients were treated in this study. The average VAS score pre-procedure was 8 (range 6–10) and had decreased to 2 as shown in table 1 and 2 below. The over all excellent pain relieve was 9 patient(75%) out of 12 .

Table 1: Showing overall relief of pain

Pain relief	Number of patients	Percent
Excellent(75 – 100 %)	09	75
Good(51 – 74%)	2	16.10
Poor(≤ 50%)	1	8.3
Total	12	100

Table 2:The mean VAS Score at different time interval.

	VAS (mean)
Before procedure	8.82±0.77
Immediate postoperative	3.20±0.21
1 month follow up	2.20±0.32
3 month follow up	1.30±0.20
6 month follow up	2.90±0.32

Duration of follow up was six months. The ages of the patients ranged from 30 to 65 years with 8 females and 4 males. As shown in table 1, out of 12 patients, excellent pain relief was (VAS:75-100%) in 9 Pt., good pain relief (VAS:51-74%) was in 02 patients and one male patient who had poor pain relief 35-40%VAS score improvement at the 6th month follow up was considered as a failure. None of the patients had complications.

Discussion: It usually responds well to conservative management such as NSAIDs, good quality cushions, and physical therapy. Steroid and local anesthetic injections to the sacrococcygeal area and coccyx are reported to be a successful measure, especially in patients with acute pain (<6 months).[5-6] As shown in our study in table one and two ,9 patients out of twelve patients had shown excellent pain relief (75-100%), 2 patients had good pain relief (51-74%) and 1 patients had poor pain relief (<50%). Average VAS score pre-procedure was 8 (range 6–10) and had decreased to 2 at the end of six months follow up. There was not any complications repoted in our study. Destruction of ganglion impar with chemical neurolysis, cryoablation or RFT was also described for pelvic pain.[3]

Ganglion impar block provides immediate pain relief and 50-75% pain relief per injection lasting weeks to months in coccydynia patients[6-7]. Coccygectomy can be performed in patients resistant to conservative treatment and injections but the patients were satisfied with ganglion impar destruction; therefore, there was no need to consider coccygectomy for them. However, successful blockade of the ganglion impar depends on accurate localization, its location exhibits anatomic variability. Although, it can be located anywhere along the anterior aspect of the sacrococcygeal joint or tip of coccyx. There might be risks for chemical neurolysis are motor, sexual,bowel, or bladder dysfunction can occur[4]. It is usually located in the midline, although in some patients, it may also be situated at the lateral aspect of the sacro-coccygeal joint. Chang-Seok et al. reported that the shape of ganglion impar varies considerably, with oval (26%) and irregular (20%) being the two most common shapes[8]

Conclusion: This is a very simple and relatively safe procedure that could be considered in chronic coccydynia patients unresponsive to conservative treatment. As our results indicate that intercoccygeal/ transcoccygeal RFT of ganglion impar may provide successful relief in the treatment of chronic coccydynia. However, large-scale studies are required for the evaluation of these kind of patients.

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83. Vitamin C Premedication reduces postoperative analgesic requirementafter surgery.

Dr. R.B. Singh, Dr. AtchyaArun Kumar

Background & Objectives: Pain has been, one of the most common medical causes of delayed discharge from hospital. It causes adverse effect such as tachycardia, hypertension, myocardial ischemia, decrease in alveolar ventilation, and poor wound healing. The reduction of pain may prevent these adverse effects and enhance early discharge. The premedication with oral vitamin C was assumed to reduce postoperative pain and rescue analgesic requirement in patients after laparoscopic surgery. **Material and Methods:** After approval from ethical committee and informed written consent from patient, study was conducted on 200 patients of ASA physical status 1 and 2, who were scheduled for laparoscopic surgeries. All the selected patients were divided in to 2 groups. Group 1 received vitamin C 2gram and group 2 patients received placebo tablets in night and 2 hour before surgery. After premedication Patients were explained about surgical procedure and visual analogue pain scale (VAS, 0: no pain and VAS 10: worst pain). Anesthesia was induced with propofol 2mg/kg and vecuronium bromide 0.1mg/kg as muscle relaxant. Anesthesia was maintained with oxygen, nitrous oxide (50:50) and isoflurane. Patients in both group received injection paracetamol 10mg/kg body weight 30 minutes before skin closure. Neuromuscular blockade was reversed and patients were shifted in postoperative recovery room. The data were recorded and analyzed. **Results:** The physical variables of both group patients were statistically comparable. Mean heart rate, blood pressure, VAS score were statistically different in early part of post operative period. The postoperative analgesic consumption in group 1 patients were significantly low .**Conclusions:** With this study we concluded that vitamin C reduces postoperative pain and consumption of fentanyl as rescue analgesic in postoperative period.

Key Words: Anaesthesia, Postoperative pain, Vitamin C.

84. Role of Ahara-Vihara and Rasayana Therapy on Osteoarthritis w.s.r. to Knee Joint

Dr. Neeru Nathani,Associate,Professor & Head,Dept. of Swasthavritta and Yoga,Faculty of Ayurveda,Institute of Medical Sciences,Banaras Hindu University, Varanasi

Osteoarthritis is a disease of synovial joints characterized by focal loss of articular cartilage and simultaneously proliferation of new bone with remodeling of joint. It is the second commonest musculoskeletal problem in the world population after back pain. Commonly affected joints are Knees, Hips, Spine and Hands. Osteoarthritis of Knee Joint is the leading cause of chronic disability in developed countries. In

Ayurveda Sandhigatavata could compare with Osteoarthritis. Sandhigatavata is a common degenerative joint disorder occurs due to dhatukshaya and vata vitiation. Limitations of conventional system of medicine in management of Osteoarthritis indicate strong need to find out other safer and effective measures for its prevention and control. Pathya Ahara and Rasayana are considered as nutritional entities responsible for healthy long life. Rasayana are recognized for rejuvenating action by maintaining proper body constitution and removal of toxins and free radicals. A study was conducted on patients of Janu Sandhigata Vata (Osteoarthritis of Knee Joint), randomly allocated into four groups. Guggulu, Yastimadhu, Ashwagandha and Glucosamine sulphate in different combinations were given to patients for total period of three months. Patients were assessed at three follow-ups, each of one month interval and observations were analyzed statistically using SPSS. At the end of study significant improvement was observed in *patients of* all four groups but group 3 and 4 showed *better results as compared to others.* Pathya *Ahara*-Vihara and selected Rasayana are efficient for better management of Osteoarthritis of Knee Joint.

Key words: *Ahara*, Vihara, Rasayana, Osteoarthritis, Sandhigata Vata.

85. Herbal Management of Anxiety and Depression in Elderly With Special Reference to Manas Prakriti.

Dr. Manoj Kumar Singh,Asstt. Professor, Kriya Sharir,Faculty of Ayurveda, I.M.S., Banaras Hindu University

All multicellular organisim including human being manifest changes as time passes**.** These is a diminution of physical, mental, biological, enzymatic and hormonal profile of the person, which brings about the changes of ageing. Ageing have been recognized to occur at social, psychological (behavioural) physiological, morphological, cellular & molecular levels. Magnitude of medical problems caused due to ageing is increasing rapidly as average longevity has already tremendously increased. Decline in cognitive functions, dementia, depression and physical inability has made the old life a burden to the individual, to the family as well as society. There is high prevalence rate of anxiety & depression in elderly in either sex group. Which affect the quality of life use of modern chemical drugs to elevate the problem may be associated high risk of side effects.ayurveda distinguish the individuals and recommend the fine tuned up, customized treatments in order to minimize the harmful effect of drugs. Keeping the facts in view there is an urgent need to provide some plant based natural product helpful in the management of both anxiety & depression. Thus considering the object in mind, in the present series of study an attempt has been made to propose a new herbal formulation, having beneficial role in the management of anxiety & depression is elderly grouped on the basis of Prakriti (Neuropsychophysical constitution) evaluated by subjective parameters.

86. STUDY OF CONCEPT OF TERMINOLOGY "VEDANA" IN CHARAK SAMHITA AND ITS INTERPRETATION

DevanandUpadhyay, Ph.D scholar and senior resident (Department of SiddhantDarshan, Faculty of Ayurveda, IMS,BHU Email: dev.asdbhu10@gmail.com

Term *vedana* is said to be originitated from word "*vida*" which means knowledge, in fact this knowledge in charak has been broadly seen as a perceiviance in form of sukha or dukha. Acharyacharak has given a list of ten drugs as vedanasthapana. It may be possible that these drugs are clinically used to establish the correct knowledge of perceptible stimuli. While in most references of sutra,nidana, chikitsacharak has also considered that vedana is a perception which is dukhatmak (painful) in nature and is present as a clinical symptomas in hridaroga, jwara, raktapitta, gulma, obstruction in flatus or urine or semen etc. It has been used as a determinant factor for assessment of psychic strength to the tolerance to vedana. Philosophical context of vedana has been explained by acharyacharaka as this samyogapurusha~ rashipurusha is perceivable body for sukha and dukha and not this independent atma.vedana is trikalika i.e. past, present and future and its treatment is naishtikichikitsa. Causes of this vedana isnonadjustment of indriya with its object, kala, and pragyaparadha. After satyabuddhi comes a stage of sanyasa where one is liberated from trikalikavedana and is free from sense of sangya, gyana, vigyana.

Key words: *Vedana, Dukha*, Pain, *Rashipurusha* etc.

चिकित्सा विज्ञान संस्थान के निदेशक

चिकित्सा विज्ञान संस्थान काशी हिन्दू विश्वविद्यालय का सर्वोच्च संस्थान है। यहाँ पर पदारूढ़ निदेशकों की एक स्वस्थ परम्परा रही है। सभी निदेशक अपने विषय के मूर्धन्य विद्वान थे और अपने सामर्थ्य के अनुसार संस्थान की उन्नति एवं विकास के लिए हर सम्भव प्रयास किए। उनका नाम व कार्यकाल निम्न है :

प्रो. के.एन. उडुपा
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प्रो. एस.के. गुप्ता
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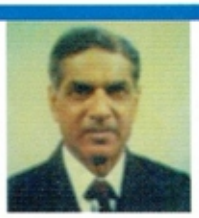

प्रो. एन.एन. खन्ना
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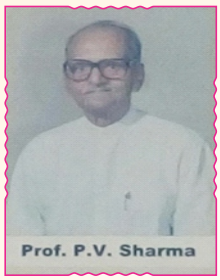
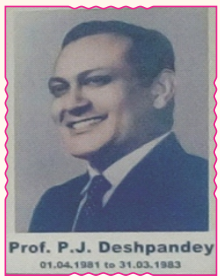

Prof. P.V. Sharma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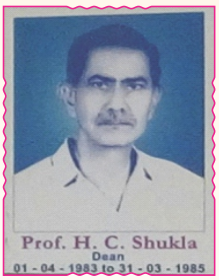
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Dean
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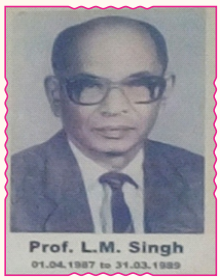
Prof. L.M. Singh
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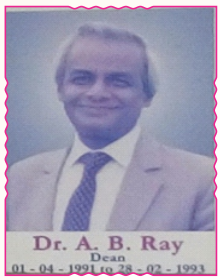
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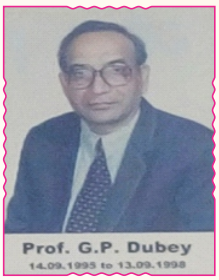
Prof. (Miss) P.V. Tewari
01.04.1989 to 31.03.1991
& 14.09.1992 to 31.09.1995


Prof. G.P. Dubey
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Prof. J.K. Ojha
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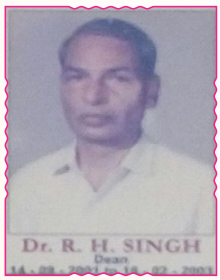
Dr. R. H. SINGH
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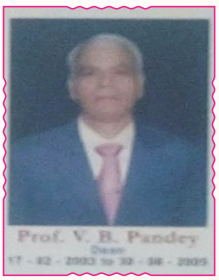
14 - 09 - 2001 to 14 - 02 - 2003


Prof. V. B. Pandey
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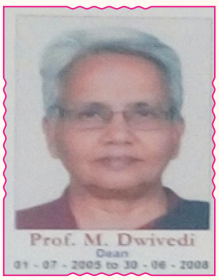
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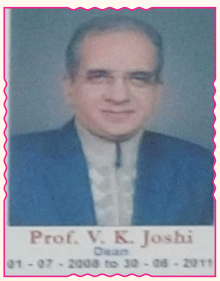
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Dr. H.S.K. Aggrawal
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Dr. A.K. Tripathi
08.11.2005 to 15.02.2009

Dr. R.K. Jaiswal
16.02.2009 to 09.07.2015

Dr. A.K. Dwivedi
01.08.2015 to till date

Hospital Pharmacy

Mr. R.P. Singh

Mr. J.P. Singh

Mr. A.P. Tiwari

Mr.O.P. Singh

Mr. A.K. Singh

Founder of Institute of Medical Science B.H.U.

Dr. K. N. Udupa
A. M. S., M. S., F. R. C. S.,
Retd. July, 1980 as Director,
Institute of Medical Sciences, B.H.U.
Presently Emeritus Professor & Chief
Co-ordinotor; I. R. D. P., B.H.U. Varanasi.

Born on 28th July 1920 graduated from Banaras in 1943. Achieved may distinguished honours in the field of Surgery as M.S. from Michgan and F.R.C.S. from Canada in 1968.

Prof. Udupa was the first Principal of College of Medical Sciences (1960 to 1970) and founder Director of Institute of Medical Sciences B.H.U. (1971 to 1980) an Executive Councilor, Rector and for some time acting Vice-Chancellor of Banaras Hindu University. Apart from being an outstanding Surgeon, he had an human approach to the surgical problems in general. He was the architect of the Post Graduate Education in Ayurveda in B.H.U.

Has guided nearly 50 Ph.D.s and a number of Post Graduates. Has Written many books on varied spectrum of subjects from Philosophy to Surgery.

An Eminent Educationist, Excellent Teacher, Dynamic Research worker and a just Adminstrator. His motto has been simple living and high thinking. Served the University as member of various committees and has been the member, Review Committee of Medical Education, Govt. of India, Medical Council of India, Governing Body, P.G.M.R., Chandigarh.

Was awarded Tamra Patra by the Indian Medicine Faculty as Symbol of his meritorious services for with holding the cause of Ayrveda in general and this Faculty in particular and giving exposure to this Faculty at the International level. Was awarded Padmashri by Govt. of India or his dedicated services in the field of Medical Sciences.

Apart from his services for the ailing humanities, research was his first love for which he devoted most of his life and was pioneer in research, specially in the field of Ayurveda and Yoga.

He had got special aptitude of Rural Programmes and introduced many schemes. Tikri Helth Centre was an experimental model started by him besides Training of Rural Health workers which was appreciated and approved by the Govt. for the whole country. He was Emeritus Professor in the University and Chief Co-ordinator, Intergrated Rural Development Programme of the University.

HOMAGE

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Late Dr.R.C.Chaudhary

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Late Dr.L.M.Singh

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Late Dr. S.N.Pathak

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Department of Sangyaharan