ABSTRACT: Katishool has become a common disorder involving the muscles and bones of the back. The disorders which affect the locomotive system have increased in today time. These conditions significantly scale back the human activities in terms of social as well as professional life. Shool in Kati Pradesh is Pratyatmaka lakshan of Katishool. The Shool is of varied varieties, which happen by Prakupita Vata Dosha. In a typical case of Katishool, pain is confined to Kati Pradesh or Lumbo-sacral and Sacro-iliac region solely. Numerous treatment choices as mentioned in modern medicine like analgesics, anti-inflammatory drugs, physiotherapy, spinal exercises etc. have their own limitations. The classical treatments in Low Back Ache like Panchkarma (five purification procedures in Ayurveda) procedure therapies preceded by Snehana and Swedana used for relaxation further as giving tone to the muscles and for promoting the blood circulation are substantially useful which pacify the Prakupit Vata Dosha, increase strength of the person, maintains health and longevity. Mridu Virechan and numerous Vasti Karma destiny as useful in eradicating the Prakupit Vata Dosha. Kati Vasti, a procedure within which both the properties of Snehana and Swedana are incorporated is an efficient remedy. An effort has been made to understand Katishool and its treatment procedures in Ayurveda and understanding Kati Vasti in detail.

Keywords: Katishool, Kati Vasti, Low Back Ache, Panchkarma.
INTRODUCTION

Low back pain (LBP) is a very important clinical, social, economic, and public unhealthiness which affects the population indiscriminately. It is a disorder with several possible aetiologies, occurring in several teams of the population, and with several definitions. Consequently, the large literature obtainable on LBP is not solely heterogeneous, however additionally contradictory. The prevalence of LBP has been found to range from as low as 6.2% (in general population) to high as 92% (in construction workers).\(^1\)

Low back pain can be medically and economically devastating. This problem supposedly has a favourable natural history, but it can be remarkably disabling which has challenged the health care providers. The medical system often fails to identify this disease early and thus leading to disproportionate amount of medical and economic expenses. Low back pain has become common nowadays. Its main cause is strain of the muscles, or other soft structures (e.g., ligaments and tendons) connected to the back bones (vertebrae). Sometimes the cushion between the bones (intervertebral disc) gets strained, and bulges out (herniates) and presses on the nearby nerves (as in case of sciatica). There is no exact clinical entity mentioned in classics as Katishool in Ayurveda, but it can be considered under the Vata Vyadhi as Asthigata Vata. It is because the pathogenesis of Katishool is Asthi Pradoshaj in the lumber region due to vitiation of Vata. Line of treatment of Vata Vyadhi as mentioned in classics are Snehana\(^2\), Swedana\(^3\), Mridu Virechana\(^4\), Vasti\(^5\). Therefore, this line of management
may be adopted for Katisshool. According to Ayurveda, Vasti with substances like milk, ghee, and Tikta Rasa Dravya is best said for the Asthi Pradoshaja Vikar. Modern medicines have just symptomatic and conservative relief. As a holistic medicine system, Ayurveda has satisfactory and cost-effective remedies. So, with the help of Ayurveda we may find a safe, cost effective and successful therapy for low back ache.

The Vata Dosha is said to be responsible for all motion related processes in the body at gross, cellular and microcellular levels, for example, circulatory movements, respiratory movements, walking, peristaltic movements in digestion, momentum of the ovum, ejaculation of sperms, excretion of faeces, urine, movement of all joints, running of nerve impulses, for perception including pain, the body’s reaction, and is also responsible for speech. Vata Dosha manages the transportation of metabolites when required for nutrition or excretion. In the absence of Vata Dosha, no movement occurs from one place to another. Therefore, whenever the normal functioning of the Vata Dosha is hampered, all bodily functions get disturbed resulting in genesis of disease process. The chief causative factors for the vitiation of Vata Dosha are consumption of excessive food having properties of Ruksha, Laghu, Sheet & Alpa Guna (dry, cold, stale food) and excessive working, swimming, walking, moving over uneven surfaces, journeys & also due to irregular sleeping habits, suppression of urges and trauma to vital parts, as described in the Ayurveda texts.

MATERIALS AND METHODS

References regarding Katishoola and its management as given in Ayurveda texts were collected from various textbooks, published research papers, previous work done and further compilation was done accordingly. Concept of Kati Vasti and its procedure was studied in detail.

PATHOGENESIS

Shoola in Kati Pradesha is chief complaint of patient of Kati Shoola. The Shoola could be of various types, caused by provoked Vata Dosha. In a typical case of Katishool, pain is confined to the Kati Pradesha or the Lumbosacral and sacroiliac region only. Pain can arise due to the vitiated Vyana Vata, which dries up the Shleshaka Kapha in the joints which is responsible for friction. If the vitiation is due to any injury, pain can manifest because of injury to the Sandhi as well as the surrounding structures of the affected Sandhi.

Radiation of pain towards the lower limb is usually not seen in a typical case, but it can
be found in few low back disorders where there is a defect in the Inter vertebral discs, which gives tension to a nerve root passing out. When vitiated Vata takes Ashraya in Kati Pradesha, it leads to the Shoshana of the Shleshaka Kapha present in the Sandhi there. Due to Shoshana of Shleshaka Kapha over there, hampered functioning of the joints occur which leads to prevention of all the movements of the Kati Pradesha. Hence the movements at the Lumbo-sacral region such as flexion, extension, lateral flexion and rotation are hampered either completely or partially. The degree of affection on movement varies depending on the presentation of etiological factors, such as the site of the structures injured and the extent of injury and duration.

**MANAGEMENT**

**Panchakarma procedure adopted**

**Snehana (oleation treatment)**- Snehana corrects Rukshata, Kharata, Parushatwa of body. Snigdhatwa, Slaksnatwa and Mriduta helps in decreasing accumulated Vata. It gets Anuloma Gati (direction) due to Snehana and thereby disease/symptoms decrease. Snehana can be given in any of the forms - Snehapanama, Abhyanga, Anuvasana.

**Abhyantara Snehana**: Snehapanama can be adopted in Kati Shoola except in certain specific conditions like Ama, Nitya Mandagni, Daurbalya, Aruchi etc. In case of associated Ama or Kapha Dosha, Langhana and Pachana are the first line of treatment followed by Snehapanama to facilitate the Niraamaavastha. After attaining Niraamaavastha, both Ghrutha Paana and Taila Paana can be effectively adopted according to the conditions.

**Bahya Snehana**: The procedure of Bahya Snehana can be performed in the form of Snehadhara, Abhyanga, Avagaha, Parisheka, Kati Vasti etc.

**Swedana**: Kati Shoola can be considered as Sweda Sadhya Vyadhi. Kati Vasti may be performed efficiently in Kati Shoola among the different forms of Sweda procedures, Avagaha Sweda, Pizhichil, Nadi Sweda, Patra Pinda Sweda, Pinda Sweda, and Upanaha Sweda. Swedana is very useful in relieving pain and restricted movements in Kati Pradesha. It can be done in entire body or only in affected part of the body like Kati, Prishta etc.

**Mridu Samshodhana**: Virechana also has important role in chronic LBP. In Vata Vyadhi most of the authors mentioned about Mridu Virechana. Eranda Taila is
recommended for Nitya Virechana in certain disorders.

*Kati Vasti:* It is a treatment procedure in which sweat is induced by means of heat in the form of steam or in contact of the body with heated medicaments. *Kati Vasti* is an effective treatment in painful conditions which are caused mainly by *Vata Dosha*, usually beneficial in degenerative diseases. It is used mainly to relieve from pain and stiffness related to bone, joint or musculoskeletal pains.

**PROCEDURE OF KATI VASTI**

**Pre-procedure**
Collection of all the materials required for procedure is done.

**Materials Required**
Medicated oil- 300-500 ml, Black gram powder- 300-400 gm.
Commonly used Medicated oils are *Dashamula Taila*, *Sahacharadi Taila*, *Maasha Taila*, *Dhanvantara Taila*, *Mahanarayana Taila*, *Bala Taila*.

**Preparation of Dough**
Black gram powder is mixed with sufficient quantity of water to make a thick paste (dough). It is then rolled into a flat slab like structure having length of about 45 to 60 cm, thickness of 2-3 cm and height 5 cm.

**Preparation of patient**
Thorough examination of patient is done. The *Prakriti* (basic body constitution) and *Vikriti* (details of morbidity) of the patient are documented in detail. The disease is also examined. The treatment line-up, materials and medicines which are needed to be used are enlisted. Patient is advised to pass natural urges of urine, stool if present. Patient is also advised to remove the clothes and expose the *Kati* area. Patient is advised to lie down in prone position.

**Procedure**
The prepared dough is fixed on the lumbar region in a proper shape, taking care to prevent any leakage of oil from any side. The chosen medicated oil is also heated passively. Required quantity of oil is taken in a bowl. Quantity of oil to be taken should be sufficient enough to fill the space within the ring of wet flour. The bowl is then kept in the vessel filled with hot water. When the oil gets warm at about lukewarm temperature, the bowl is removed from the vessel of hot water. Oil is then poured slowly into the space within the constructed ring of wet flour. Uniform lukewarm
temperature is maintained throughout the process by replacing warm oil. The oil is kept in the space for about 30-40 minutes. Oil is removed after the prescribed time by dipping cotton and squeezing in a container or with the help of spoon. A uniform lukewarm temperature is maintained by reheating the oil and replacing the heated oil. Care should be taken to maintain the temperature of the oil in the pool. The temperature of oil should be kept uniform throughout the procedure. For this to happen, the oil from the pool is removed at regular intervals but leaving some oil behind and not completely removing the oil. After this, it should be replaced by warm oil which is simultaneously heated on the other side.

**Post-operative procedure**

Dough is removed afterwards and the area is wiped off and cleaned with lukewarm water. Patient is given light oil massage for about 5-10 minutes. Thereafter the patient is advised to take rest for about 10-15 min in comfortable position. Oil used once can be filtered and reused for next two days. But on 4th day, the fresh oil is to be used. Patient is advised to take light diet and hot water after procedure.

**MODE OF ACTION**

*Kati Vasti* is the process in which both properties of *Snehan* and *Swedan* are incorporated. It comes under direct contact with painful area; hence it is said more effective. In *Katischool, Samprapti* is at *Kati* region and is mostly associated with structural changes of lumbar vertebral column. There is derangement in Lumbo-Sacral joints and vertebrae, degeneration of intervertebral disc and lubrication function of *Shleshak Kapha* is affected, which results in severe pain. Therefore, local *Snehan, Swedan* are very effective and give quick results because they act at the site of *Samprapti*. As *Vata Dosha* is *Sheet, Ruksha* in nature and *Sweda* being *Ushna* with prior *Snehana* (*Snigdha* in nature), it causes *Vata Shaman*. *Swedan* increases sweat and brings out *Mala Dravya* along with sweat. Hence it decreases *Kleda* in the body resulting in reduction of *Guruta* and *Stambha* which are common symptoms of *Vatavyadhi*. After *Swedan* therapy, *Romanch, Toda, Shotha, Stambha, Angagraha, Aayam* vanishes and organs become soft and elastic.

**DISCUSSION**

According to *Ayurveda*, *Shoola* (pain) occurs due to vitiation of *Vata Dosha*.17,18
Vata Dosha is vitiated by Srotas Awarodha (Obstruction of channels) & Dhatu kshaya (depletion of tissue / malnutrition)\(^\text{19}\). Samanya Chikitsa of Vatvyadhi is Abhyang, Swedan, Vasti. In Katishoola, Apan Vata is mainly involved. Therefore, the aim of the treatment is to pacify vitiated Vata Dosha specially Apan Vayu. Snehan and Swedan act as Vata Shamak, increases blood circulation and relieves pain by local action. The mode of action of Abhyanga can be understood by the properties of Snehana karma i.e. Snigdha and Guru properties act as Vatahara, Snehana, Balya and Pustikara; Mridu guna reduces the stiffness caused by Kathinya guna; Suksham guna is the property which helps the drug to reach up to minute channels.

Kati Vasti is a localised treatment therapy and can be considered under both Snehan and Swedan Upkrama. As per Ayurveda view, Taila is having the property of Vata Kapha Shaman. In Kati Vasti, warm Taila is kept locally at lumbar part of the body. Due to Ushnata, Prakupitta Vata Kapha Dosha become pacified and increase the blood flow at Lumbo-Sacral area which helps to flush out the Prakupitta Dosha and render relief from painful spasm. At the same time, it provides good nutrition to the affected area. Due to rejuvenation therapy of Taila, increased tone of muscle tissue and spinal nerves occurs. Kati Vasti acts locally at lumbar region by both actions local oiling and fomentation. It helps in relieving pain.

CONCLUSION

Vata is chief among the three Dosha and the functional requirement for both Kapha and Pitta. If co-ordination of Vata gets disturbed then the diseases are going to manifest. Kati Vasti may help to increase blood circulation to the affected area, gets rid of Dosha imbalances, strengthens the muscles in the area, helps the release of toxins and reduces inflammation. Acharya Charaka has pointed that when even dry wood can be made to become soft and flexible with Snehana and Swedana, then why not the living organisms? Kati Shoola can be effectively managed by judicious use of Panchkarma, especially Kati Vasti and by following proper diet and lifestyle.

Acknowledgement:- Nil
Financial Assistant:- Nil
Conflict of interest :- Nil
REFERENCES

1. Supreet Bindra, Sinha A.G.K., Benjamin A.I.; Epidemiology of Low Back Pain in Indian population-A review; International Journal of Basic and Applied Medical Sciences; 2015, Jan-April; Vol 5(1); page no- 166-179

2. Yadavji Trikamji Acharya Agnivesh; Charaka Samhita; Ayurveda Dipika Commentary by Shri Chakrapanidutt edited; Chaukhambha Subharti Prakashan; Varanasi; Reprint 2015; Chikitsa sthan 28/75; pg 620

3. Yadavji Trikamji Acharya Agnivesh; Charaka Samhita; Ayurveda Dipika Commentary by Shri Chakrapanidutt edited; Chaukhambha Subharti Prakashan; Varanasi; Reprint 2015; Chikitsa sthan 28/78; pg 620

4. Yadavji Trikamji Acharya Agnivesh; Charaka Samhita; Ayurveda Dipika Commentary by Shri Chakrapanidutt edited; Chaukhambha Subharti Prakashan; Varanasi; Reprint 2015; Chikitsa sthan 28/83; pg 620

5. Yadavji Trikamji Acharya Agnivesh; Charaka Samhita; Ayurveda Dipika Commentary by Shri Chakrapanidutt edited; Chaukhambha Subharti Prakashan; Varanasi; Reprint 2015; Chikitsa sthan 28/86; pg 620

6. Yadavji Trikamji Acharya; Agnivesh; Charaka Samhita; Ayurveda Dipika Commentary by Shri Chakrapanidutt edited Chaukhambha Subharti Prakashan; Varanasi; Reprint 2015; Sutra sthan 12/7/21; pg 180

7. Yadavji Trikamji Acharya; Agnivesh; Charaka Samhita; Ayurveda Dipika Commentary by Shri Chakrapanidutt edited Chaukhambha Subharti Prakashan; Varanasi; Reprint 2015; Sutra sthan 12/8; pg 79

8. Vijay Rakshit and Shri Kantha Dutt Madhavkar; Madhav Nidan; Madhukosh Sanskrit commentary, hindi commentary by Narendra Nath Shastri, Motilal Banarsidas, Delhi, edition 2005, Ma.Ni.22/1-4

9. Yadavji Trikamji Acharya; Agnivesh; Charaka Samhita; Ayurveda Dipika Commentary by Shri Chakrapanidutt edited Chaukhambha Subharti Prakashan; Varanasi; Reprint 2015; Sutra sthan 13/53-56; pg 84-85

10. Yadavji Trikamji Acharya; Agnivesh; Charaka Samhita; Ayurveda Dipika Commentary by Shri Chakrapanidutt edited Chaukhambha Subharti Prakashan; Varanasi; Reprint 2015; Sutra sthan 14/20-24; pg 89
11. Yadavji Trikamji Acharya, Agnivesh; Charaka Samhita; Ayurveda Dipika Commentary by Shri Chakrapanidutt edited; Chaukhambha Subharti Prakashan; Varanasi; Reprint 2015; Chikitsa sthan 28/83-84; pg 620

12. Dr. Surya Prakash, Dr. Nirmal Bansal, Dr. Gopesh Mangal, Gunjan Garg; Review of Kati Basti- Oil pooling Ayurveda procedure; World Journal of Pharmaceutical Research; 2017; Vol 6(10); page no 459-464

13. Dr. Surya Prakash, Dr. Nirmal Bansal, Dr. Gopesh Mangal, Gunjan Garg; Review of Kati Basti- Oil pooling Ayurveda procedure; World Journal of Pharmaceutical Research; 2017; Vol 6(10); page no 459-464

14. Dr. Surya Prakash, Dr. Nirmal Bansal, Dr. Gopesh Mangal, Gunjan Garg; Review of Kati Basti- Oil pooling Ayurveda procedure; World Journal of Pharmaceutical Research; 2017; Vol 6(10); page no 459-464

15. Yadavji Trikamji Acharya; Agnivesh; Charaka Samhita; Ayurveda Dipika Commentary by Shri Chakrapanidutt edited Chaukhambha Subharti Prakashan; Varanasi; Reprint 2015; Sutra sthan 1/59; pg 16

16. Yadavji Trikamji Acharya; Agnivesh; Charaka Samhita; Ayurveda Dipika Commentary by Shri Chakrapanidutt edited Chaukhambha Subharti Prakashan; Varanasi; Reprint 2015; Chikitsa sthan 28/80-81; pg 620

17. Yadavji Trikamji Acharya, Sushruta; Sushrata Samhita, Nibandhsangraha commentary by Dalhan, Chaukhambha Subharti Prakashan, Varanasi 2003; Sutra sthan 17/12

18. Hari Sadasiva Sastri Paradakara, Vagbhtta; Ashtang Hridya, Sarvang Sundra and Ayurveda Rasayana commentary by Arundatta and Hemadri Bhishakacharaya edited Chaukhamba Sanskrit Samsthan, Varanasi, Reprint 2014; Sutra sthan 29/6

19. Yadav Trikamji Acharya Agnivesh Charak Samhita; Ayurveda Dipika, Chaukambha Subharti Parkashan varansi ; Chiktsa stahn 28/15-18; pg 617