INTRODUCTION

The changed life style, stress, excess travelling, improper postures, occupation, all these interfere the normal life. Lumbago/Sciatica is the common outcome of the above. Low back ache refers to pain from the lower lumbar areas, lumbo-sacral areas and both the sacro iliac joints. It is the second most common cause affecting the working population\(^1\). This is a major cause of disability and an important driver of health care costs in the United States and other countries.\(^2\) This reflects the necessary attention and intervention.

Ayurvedic literatures explain different diseases affecting the *kati* region. They mainly present with pain (local or radiating) or stiffness as one of the prominent symptoms in the *kati pradesha* and even end up in crippling. The *vata vyadhi nidana* specific to the diseases causing *Kati shula/Gridhrasi* are categorized as *agantuja* and *nija.*

**Aagantuja karana:** *Abhigata and Apatamsana:* Hit on the back, fall from a height are the common forms of trauma (*abhighata*). The above two causes are the *sannikrusa nidanas* for the disease affecting the *katipradesha*.

When the intensity is mild, this may cause minor injury in the *snayu, sira, khandara, Asti and sandhi* of *Kati pradesha* or in severe cases it may cause severe injury to these structures causing *sandhi cyuti or asti bhagna.* *Marmabhighata* is another possible consequence. Here the pain resulted is mainly because of *vata prakopa.* There will be an acute and severe pain with or without radiation. When the *khandaras* are affected, then radiating pain will be the symptom.

Fall from a height, road traffic accidents are the common causes for the thoraco lumbar injuries. Wedge compression, stable burst fractures, unstable burst fractures are the different types of fractures. Here patient gives a history of fall/road traffic accidents, based on the severity of injury, there will be
pain, swelling, palpable interspinous gap or a step may be felt. Individual nerve root may be involved. Investigations like X ray, Computed tomography/ Magnetic resonance imaging help to confirm the diagnosis.  

**Marmabhighaata:** This may result from Abhigata, Apatamsana. Based on the site of injury, marmas in that place are affected and presents with specific marmabhighata symptoms. Injury to the kukkundara marma in the low back will result in chestahani of adha kaya, sparshaajnata. Nitamba marma injury leads to adhah kaya shosha and daurbalya.

The khandaras in adhashaka which starts from shroni and ends in nakhagra praroha (Tip of the toe) explains the radicular pain in Gridhrasti.  

In severe road traffic accidents/ fall, there may be unstable burst fractures which present with neurological symptoms ranging from paraplegia to individual nerve root involvement. All the reflexes are lost during spinal shock period. Cauda equina paralysis is present if the lesion is below L1. Spinal cord injury may be the result in some accidents which presents with complete paralysis, sensory paralysis, or motor paralysis. 

Lumbar spinal stenosis where neurogenic claudication is a usual symptom. Motor and sensory involvement is common with bowel and bladder incontinence.

**Nija karanas:** They are categorized under aharajanya and viharajanya. These are the viprakrusta nidanas.

**Aaharajanya:-**  
**Ruksha, sheeta, laghu anna:-** Regular or excess intake of such food articles cause vata prakopa. Excess of Katu rasa dominant food intake causes karshana and because of agni and maruta guna dominance, they produce vata rogas in prushta and parshva. Excess of tikta rasa intake causes shoshana of all the dhatus and produce vata vikaras. Excess of kashaya rasa dominant food intake causes karshana because of khara ruksha guna it causes vata vikara.

**Alpa abhojana:** By frequent indulgence, they cause uttarottara dhatu kshaya, upadhatsu kshaya and vata prakopa. They lead to asti majja kshaya, shoshana of upadhatu.

**Viharajanya :**  
**Ati adhva, vyayama, vicheshta, Dhukha shayya asana, Gaja Ushtra Ashva sheegra yana** (Present day, this yaana may be considered as travelling in motor vehicle with a jerky movement) – These viharas with the frequent indulgence cause vata prakopa, repeated indulgence in later course, they leads to dhatukshaya. Some time they may cause minor viddhata (injury) or shithilata in the dhatu, upadhatu and sandhi in kati pradesha leading to the disease.

Repeated bending, twisting activities, posture which cause unbalanced spine lead to repeated strain over the muscle, ligaments, disc in the low back leading to the degeneration. These also lead to arthritis of the facet joints in the low back region. Another most common cause of backache is bad posture which increases the strain on the ligaments and discs causing faster degeneration. These degenerative changes make the disc susceptible for the trauma or may rupture without any cause.

When the spine becomes unbalanced like in bad postures, twisting movements a greater number of muscle fibers are called into play at frequent intervals to keep the spine straight. Thus fatigue develops earlier. This fatigue causes muscle insufficiency as a result of which spine sags, putting the strain
on the ligaments and posterior articulating facets. Gradually changes occur at the facet joints and lumbo sacral junction. Vega sandharana: Repeated vega sandharana specifically mala and moostra vega leads to apana vata vaigunya and result in pakwashaya gata or guda gata vata where kati shula is also a presenting feature. Other consequence of vega dharana may be the shakrutavruta vata condition.

Margaavarana by Ama: The aama formed causes marga varana of vata producing the diseases. Any pathogenesis which forms the aama, obstructs the maarga of vata in kati. In long course, this formed, untreated aama can cause the shithilata of the dhatu, upadhatu and marma in the Kati. Here patients present with more saama vata or saama kapha lakshana like morning stiffness, stab-data, gauravatha,

Other vata prakopa karanas can lead to this disease by repeated indulgence. Some are like:

Bhaaravahana: Regular lift of heavy weight over the back cause repeated injury in the asti, snayu in kati pradesha. They cause vata prakopa and dhatu kshaya leading to different disease like asti kshaya, snayugata vata, asti majjagata vata, Sandhi cyuti (sramsa).

Stabilization of the back muscle is less good during movements, especially if performed abruptly or associated with lifting of a weight. This overloading, unbalanced, unwarranted movements increases load on the muscles and discs. Movements like weight lifting, fall on the buttock, direct trauma over the back, twisitng movements, these all increase in pressure suddenly which will result in rupture of annulus.

Congenital diseases: Some of the congenital bone malformations like Spina bifida occulta, Spondylolysthesis, Spondylolysis are the common birth deformities which gradually causes low back pain with or without radiation depending on the severity. These are to be understood from the point of Janmabala pravrutta vyadhis.

Finally all these above nidanas lead to vata prakopa directly or vata prakopa because of dhatukshaya or aavarana. By analyzing the nidana and dosha dooshya involved, based on the symptom in the patients, proper diagnosis is made. Some of the conditions are – Gridhrasi, Kati shoola/graham, trika shoola, astigata, majja gata, snayugata vata, astikshaya, majja kshaya, gudagata vata, pakwashayagata vata, Shakrutaavruita vata. Asti bhagna, sandhi cyuti(sramsa), marmabhighata.

In other diseases, pain or stiffness in the low back are the associated complaints like in aamavata, vataja pradara, arbuda, vataja arshas, vatodara, vataja shula, vidradhi and so on. Here the nidana and samprapti explained for that diseases are to be considered.

Why in kati? : All the above nidana causes vata prakopa then leading to Dhatukshaya or Vice versa. Then the presentation of the symptom in Kati pradesha is decided by several factors starting from prakruti of a person, nature of the food article, vihaara, occupation, chances of abhigatha.

To assess the structures involved, to confirm the diagnosis, one can suggest specific investigations to the patients. It also helps us to rule out some of the illness where low back ache is the symptom like secondaries, infections or diseases which requires surgical interventions like burst
traces, dislocations, and some herniations.

**TREATMENT:**

The treatment is mainly aimed at intervention of the pathogenesis, relieving the symptoms and preventing the recurrence. *Samprapti vighatana* should be the initial intention of the treatment later being the strengthening the low back area so that the recurrence is prevented. The line of management is planned based on the *dosha* and *samprapti*.

*Nidana parivarjana* should be the first line to advice. Excess travel, *bharavahana*, vega *sandharana*, *dhukha shayyasana* are to be strictly avoided which may worsen the condition or predispose the second episode.

Specific *chikitsa sootras* are to be followed as explained in the *samhitas*, if the diagnosis is *kati shoola/graha*, *asti majja kshaya*, *gata vata*, *marmabhighaata*, *gudagata vata*, *pakhwashayagata vata*, *shakrutaavruta vata*. *asti bhagna*, *sandi cyutii(sramsa)*, *Gridhrasi*.

Apart from this, the following *chikitsa* is also advised when *kati shula* is the symptom.

**Paachana chikitsa:** In the association of *aama*, with *kapha*, initial line of treatment should be *paachana chikitsa*. Here *shunti*, *chitraka*, *panchakola* can be used. This helps in *aama paachana* and *sroto vishodhana*. Once the *aamavasta* is cleared, treatment is planned based on the *dosha* dominance.

**Vaataanulomana:** *Kati pradesha* is specifically *apaana vata sthana*. When there is *apana vata vaigunya*, then, the main line of treatment is *anulomana chikitsa*. Here *vata prakopa* is also associated. So the drug should have *snigdha rasa*, *anulomana*, thus causing *vata shamana*. Along with other treatment, *Eranda taila* can be advised in the patient for *vatanulomana* and *vata shamana*. In *shakrutaavruta vata*, *Gridhrasi* the treatment advised is administration of *Eranda taila*.

**Swedana chikitsa:** As there is *vata* and *kapha prakopa* presenting with *stambha*, *graha*, *shoola*, *gaurava in kati pradesha* and in limbs, *swedana chikitsa* is best advised for *vata* and *kapha shamana*. *Sweda* relieves *stambha gaurava*, *shoola* because of its *ushnadi gunas*. The *snigdha* and *ruksha* type of *sweda* is decided based on the *dosha* involved.

In the presence of *kevala vata*, *dhatukshayaja vata*, *snigdha sweda* is advised in the form of *kati basti, naadi sweda*. The *taila and kashaya dravya* used should have *vata shamana, shoolahara, brumhana guna*.

In the presence of *kapha* and *aama*, *ruksha sweda* is given in the form of *Valuka sweda*. Likewise *nadi sweda* is also indicated without *abhyanga*. Once the *aama* or *samsrusta kapha avasta* is cleared, then *vata chikitsa* is advised. *Sankara sweda* is advised using suitable drugs. *Avagaha sweda* is beneficial to some extent.

**Basti chikitsa:** This treatment has got a major role in the treatment of different pathogenesis of *Gridhrasi* and *kati shula*.

In *kevala vataja* condition *vataghna basti* is planned like *Dashamoola, Eranda-moola, Balaamoola niruha basti*. The *kalka dravya* should have *vatahara, rasayana guna* like *Ashwagandha*, *Shatpushpa*. *Avapa dravya* like *maamsa rasa* can be added as an optional.

In *kapha pradhana* or *saama and aavarana* conditions, should plan *teekshna basti* like *Kshara basti*, *Vaitarana basti*. 
Kaphaghna basti is prepared like Eranda-moola kshaara basti with the avaapa dravya like goomutra, chincha rasa, amla kanji.

In case of marmabhighaata, yapana basti like Raja yapana basti is selected. In asthi pradoshaja vikaara, tikta rasa ksheera basti with tikta sarpi as sneha is selected. So also matra basti with specific sneha according to the condition is to be selected. In these conditions, repeated course of basti chikitsa is to be planned.

Nitya matrabasti or nitya snehana is indicated in those who are actively involved in such stressful activities which cause strain to the Kati pradesha. Snehana with the above procedures prevent them from Vata prakopa.

Measure to prevent the recurrence: Once the samprapti vighatana is achieved, the next line of management is to prevent the recurrence. For that, nidana parivarjana, life style modification, back strengthening exercises are to be advised. Persons who are prone for vata prakopa, they should follow measures for vata shaman like nitya abhyanga, repeated course of matra basti, following dinacharya and rutucharya.

CONCLUSION: Lumbago/ Sciatica are one of the common diseases affecting all age groups. Assessment of nidaana, dosha dooshya involved, and understanding the samprapti helps in diagnosis and management.

REFERENCES:

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