

# Journal of Ayurveda and Integrated Medical Sciences

www.jaims.in





No to

ISSN: 2456-3110 **CASE REPORT** July-Aug 2017

# An Ayurvedic management of Annular Tear of Lumber Intervertebral Disc - A Case Study

Sheetal Tokle, 1 Sweety Ruparel, 2 Akanksha Sharma, 3 Hetal Ramani 4

<sup>1,3,4</sup>Post Graduate Scholar, <sup>2</sup>H.O.D and Professor, Department of Panchakarma, Govt. Akhandanand Ayurved College, Ahmedabad, Gujarat, India.

## ABSTRACT

Intervertebral discs are fibro cartilaginous structures. They give shape to the vertebral column. The discs act as a remarkable series of shock absorbers. Surrounding each intervertebral disc, a tough, shock absorbing layer known as annulus, protect the disc's vulnerable interior. An annular tear occurs when this outer hard layer cracks. Causes of annular tear are aging process of spine, injury, trauma etc. Medicines like Non-steroidal Anti-inflammatory Drugs (NSAIDs), Narcotic drugs, injections and surgery which have their limitations and having some adverse effects too. In present era, awareness and popularity of Ayurveda is increasing day by day and people prefer to be treated by Ayurveda. So, Ayurveda is more favoured by people. According to Ayurveda annular tear can be understood as Abhighata Janya Katigatavata. In this single case study an effort has been made to manage annular tear in lumbar intervertebral disc, through Ayurveda. A 48 year old female, suffering from annular tear of lumbar intervertebral disc desiccation and herniation, was treated with Tikta Kshira Basti for 15 consecutive days. Simultaneously Kati Basti and internal medicines were also given. Noticeable relief was found in all symptoms of the patients, so here a single case study is presented.

Key words: Annular Tear, Abhighata Janya Katigatavata, Tikta Kshira Basti, Kati Basti.

#### **INTRODUCTION**

The neck and back bear majority of a person's weight and are highly vulnerable to degeneration.[1] Intervertebral discs are fibro cartilaginous structures which give shape to the vertebral column. The discs act as a remarkable series of shock absorbers. Surrounding each intervertebral disc, a tough, shock absorbing layer known as annulus, protect the disc's vulnerable interior. An annular tear is a common incidence of the age related natural deterioration of

Address for correspondence:

Dr. Sheetal Tokle

Post Graduate Scholar, Department of Panchakarma, Govt. Akhandanand Ayurved College, Ahmedabad, Gujarat, India.

E-mail: s.tokle1411@gmail.com

Submission Date: 11/07/2017 Accepted Date: 06/08/2017

Access this article online **Quick Response Code** 

Website: www.jaims.in

DOI: 10.21760/jaims.v2i4.9380

the spine. As time goes on and the spine undergoes pressure from weight gain and stress, the discs may become pressed and squeezed between the vertebrae. A healthy disc holds the proper position under pressure by allowing the elastic outer layer to push in the inner disc fluid and hold it in place. However, after years of pressure and stretching, the elasticity in the outer layer may dissolve, allowing the inner disc fluid to form small rips and tears in the outer layer. This is called an annular tear.

Main causative factors of an annular tear are lifting heavy objects, conditions that strain the spinal column, such as obesity etc., sudden injury, trauma or accident, usually from manual labour or high impact sports like football.

According to Ayurveda annular tear can be correlated with Abhighata Janya Katigatavata. In this condition Abighata (injury) may lead to Dusti of Sthanstha Rasa Raktadi Dathus and Vata Dosha which lead to Vikruti in Asthi, Snayu, Kandara and symptoms like pain, swelling, tingling sensation etc. occur. Basti is one of **ISSN: 2456-3110 CASE REPORT** July-Aug 2017

the best treatments for vitiated *Vata Dosha*.<sup>[2]</sup> *Tikta Kshira Basti*<sup>[3]</sup> is indicated in *Ashthipradoshaja Vyadhi*.

#### **Current treatment option**

NSAIDs, Narcotic drugs, Selective Nerve Root Block Injections (SNRB), Epidural Injections, Physical Therapy Program, Low Impact Exercise and Surgery. However, these medications give immediately relief from pain but they can cause some serious side effects. So Ayurveda is more favoured by people.

#### An Ayurvedic Approach: A cost effective option

In this case study an effort has been made to manage annular tear, desiccation and herniation of L4-L5 based on treatment of *Abhighata Janya Katigatavata*. The treatment protocol comprises of *Tikta Kshira Basti, Kati Basti* along with internal medication.

#### **CASE PRESENTATION**

A 48 years old female patient, housewife, living at Sanand, Gujarat; came with complaints of back pain (lumbar region) and left leg pain, tingling sensations, swelling on left leg, difficulty in walking, loss of appetite at Government Akhandand hospital Ahmedabad, Gujarat.

#### **Case History**

Before two year ago, Patient had back pain after fall down on floor at home and got mild relief in pain with NSAIDs. But her routine life style was disturbed and could not walk more than 10 min. Then she consulted orthopaedic doctor and MRI was suggested. MRI findings showed that she had postero-central annular tear in L4-L5 intervertebral disc desiccation and herniation which causing mild compression over traversing and exiting nerve roots. Patient had taken NSAIDs and analgesics medicines off and on. Five months ago again she fall down on floor at home and got severe back pain at lumbar region, symptoms as mention above which was not relieved by routine medicines so she came to OPD of Akhandanad Ayurveda hospital, Ahmedabad.

#### **On Examination**

Prakruti - Vata-kaphaja

Weight - 70 kg.

Height - 5'3"

B.P - 130/80 mmHg

Pulse - 76/min

Mild tenderness and swelling over left leg.

SLR in right leg 45° and in left leg 25°

#### **Treatment Protocol**

Treatment was planned considering Abhighata Janya Katigata Vata, Grudhrasi, Vata Dushti and Ashthidhatu Dushti. She was given Tikta Kshira Basti for fifteen consecutive days along with Kati Basti with Murivenna Taila<sup>[4]</sup>and Shamana treatment for twenty five days. During the treatment Pathya Ahara-vihara was advised to the patient.

#### Panchkarma treatment schedule

SN	Therapy	Dose	Kala	Duration
1.	Tikta Kshira Basti	360 ml	Once in the Morning	15 days
2.	Kati Basti with Murivenna Taila	As required (about 60-70 ml)	Once in the Morning	25 days

#### Tikta Kshira Basti ingredients

- Makshika 60 ml
- Saindhava Lavana 5gm
- Goghruta 100ml
- Kalka 30gm (Aswagandha Churna, Shatavari Churna, Asthishrunkhala Churna - each 10gm)
- Dugdha 200 ml (Basti made and given as per classical method)

**ISSN: 2456-3110 CASE REPORT** July-Aug 2017

#### Shamana treatment schedule

SN	Drug	Dose	Kala	Anupa na	Durat ion	Reason for selection of drug
1.	Dashm oola Kwatha [5]	40 ml Bd.	Early Morni ng and evenin g, empty stoma ch	-	25 days	Tridhosha Shamaka, Shotahar a
2.	Trikatu Churna <sup>[</sup> 6]	3 g. Bd	Before lunch and dinner	Luke warm water	25 days	Dipana, increse bio- availabilit y
3.	Navajiv anarasa [7]	2 tab Tds. (each of 250mg )	Morni ng, Noon and Evenin g	Luke warm water	25 days	Dipana, Pachana, Shulahara , Balya, Raktapau stika, Nadibalap rada
4.	Punarn ava Guggul u <sup>[8]</sup>	2 tab Tds (each of 500 mg)	Morni ng, Noon and Evenin	Luke Warm water	25 days	Shulahara

### **RESULTS**

Sign and Symptoms	ВТ	After Tikta Kshira Basti course (15 days)	After 25 days
Pain	+++	++	+
Tingling sensation	++	+	+
Swelling on left leg	++	+	-

Difficulty walking	in	++	+	-
SLR test		Right leg 45°, left leg 25°		Right leg 50°, left leg 45°

#### **DISSCUSSION**

Acharya Charaka has mentioned Tikta Kshira Basti in Ashtipradoshjanya Vikara. However, Acharya hasn't mentioned any specific ingredient. So, medicines like Ashwagandha<sup>[9]</sup>and Shatavari<sup>[10]</sup>which possess Tikta Rasa, Shophahara, Rasayana properties have been selected as Kalka Dravya. Besides this Shatavari has Vata Pitta Astra (Rakta) Shotha Shamaka property and contains naturally formed phytoestrogen which increases bone minerals density. Ashthishrunkhala<sup>[11]</sup> is Vata-Kapha Dosha Shamka and helps to bone healing process. Research studies of these medicines show that all these medicines have bone healing properties along with sedative, anti-inflammatory, anti-aging properties.

Murivenna Taila is well known for reducing pain and helps in faster healing. So Katibasti with Murivenna Taila becomes very useful in this type of injury. Besides this Shamana treatment is also necessary to break down Samprapti. For this purpose patient was given Shamana drugs available in the hospital. Dashmoola Kwatha is effective in reducing pain and it is Tridhosha Shamaka. Trikatu Churna has Agni Dipana (carmitive) property, it enhances the bio availability of the co-herbs. Researches on Trikatu Churna shows that, it has anti-inflammatory, antioxidative, analgesic properties. Navjivanarasa is used as Dipana, Pachana, Shulahara, Balya, Raktapaustik, Nadibalprada (Neuro tonic) and in Vataja Roga. Punarnava Guggulu useful in Grudhasi, Uru (thigh) Trik (lumbo-secral region) Gata Vata. combination of Tikta Kshira Basti, Kati Basti along with Shamana provided good result in pain and other symptoms. Patient can do her daily activates without pain and can walk more than 25min, However, There is no major changes seen in MRI (BT and AT), but symptomatically markly improvement was observed

**ISSN: 2456-3110 CASE REPORT** July-Aug 2017

in pain and other symptoms. Patient is still on *Shamana* treatment and follows up every fifteen days.

#### **CONCLUSION**

Tikta Kshira Basti, Kati Basti and Shamana treatment is effective to relieve pain occurring due to annular tear, intervertebral disc herniation and compressing nerve roots. If these medication will be continued for prolong period reversible changes in MRI may be found.

#### **REFERENCES**

- https://spinecare.luminhealth.com/condition/annulartear/
- Kaviraj Atrideva Gupta. Ashtanga Hrdayam, edited by Vaidya Yadunandana Upadhyaya, reprint edition, Chaukhambha Sanskrit Sansthan, Varanasi, 2012:p.14
- Chakrapanidatta. Ayurveda Dipika Commentary on Charaka Samhita, reprint edition, Chaukhambha Sanskrit Sansthan, Varanasi, 2016:p.180.
- 4. https://www.keralaayurveda.biz/product/murivenna-thailam/
- Ambikadatt Shastri. Sushruta Samhita, reprint edition, Chaukhambha Sanskrit Sansthan, Varanasi, 2010:p.188
- Ambikadatt Shastri. Sushruta Samhita, reprint edition, Chaukhambha Sanskrit Sansthan, Varanasi, 2010:p.189

- Rasatantra Sara and Siddha Yoga Sangraha, 21<sup>st</sup>edition, volume 1, Krushna Gopal Ayurved Bhavan, Ajmer, Rajsthan, 2012: p. 224.
- 8. Brahma Sankarmishra. Bhavaprakash Nighantu. 2<sup>ed</sup> part, eleventh edition, Chaukhambha Bharti Academy, Varanasi, 2010:p.314.
- 9. Brahma Sankarmishra. Bhavaprakash Nighantu. 2<sup>ed</sup> part, eleventh edition, Chaukhambha Bharti Academy, Varanasi, 2010:p.392.
- Brahma Sankarmishra. Bhavaprakash Nighantu. 2<sup>ed</sup> part, eleventh edition, Chaukhambha Bharti Academy, Varanasi, 2010:p.393
- 11. Brahma Sankarmishra. Bhavaprakash Nighantu. 2<sup>ed</sup> part, eleventh edition, Chaukhambha Bharti Academy, Varanasi, 2010:p.418.

How to cite this article: Sheetal Tokle, Sweety Ruparel, Akanksha Sharma, Hetal Ramani. An Ayurvedic management of Annular Tear of Lumber Intervertebral Disc - A Case Study. J Ayurveda Integr Med Sci 2017;4:337-340.

http://dx.doi.org/10.21760/jaims.v2i4.9380

**Source of Support:** Nil, **Conflict of Interest:** None declared.