



## AYURVEDIC UNDERSTANDING AND MANAGEMENT OF CHONDROMALACIA IN PATELLA: A CASE STUDY

### Ayurveda

Soumya. E. A\*

Assistant Professor, Department of PG studies in Kayachikitsa, Sri Jayendra Saraswathi Ayurveda College, Nazrathpettai, Chennai, Tamil Nadu, India \*Corresponding Author

### ABSTRACT

Chondromalacia Patella is a disease in which the hyaline cartilage of patella is genetically soften and easily wears away. It more commonly occurs in women than men and it is attributed to increased Q angles in women. Active young adults who participate in running sports or workers who increase stress in their patella femoral joint by repeated stair climbing and/or kneeling have a higher incidence. A 26 year old female who is not a K/C/O DM and HTN was admitted in Sri Jayendra Saraswathi Ayurveda Hospital on 20/01/2020 with a confirmed diagnosis of Chondromalacia Patella. The patient was presented with complaints like pain in the anterior part of the right knee joint associated with stiffness, swelling, burning sensation, crepitus and difficulty in walking since 1 year. The condition was diagnosed as *Janu Sandhigata Vata* in the *sama avastha*. Initially the treatment was started with *amapachanam* and *agni deepanam* followed by and *brumhana* line of management for 17 days. Significant improvements were observed in various subjective and objective parameters after the treatment. The patient was discharged with oral medications in the form of for 2 weeks and advised for follow up.

### KEYWORDS

Brumhanam, Chondromalacia Patella, *Janusandhigata Vata*

### INTRODUCTION

Chondromalacia Patella is a disease in which the hyaline cartilage of patella is genetically soften and easily wears away<sup>1</sup>. It more commonly occurs in women than men and it is attributed to increased Q angles in women. Active young adults who participate in running sports or workers who increase stress in their patella femoral joint by repeated stair climbing and/or kneeling have a higher incidence. Chondromalacia is also seen as a complication of injuries, immobilization and surgical procedures that lead to quadriceps atrophy. Cause is the micro-trauma created by the decreased pull of the quadriceps muscles on the patella<sup>2</sup>. In Ayurveda this condition can be understood as *Janusandhigata vata*. In the present case the patient was having the classical *lakshanas* of *janusandhigata vata* like *shoola*, *shopha*, *vedana* during *akunchana* of right knee<sup>3</sup>. The treatment protocol was designed as *amapachana* followed by *brumhana* line of management.

### CASE HISTORY

26 year old female patient came to the Out Patient Department of Sri Jayendra Sarswathi Ayurveda College, Chennai with confirmed diagnosis of chondromalacia patella, Grade II. The presenting complaints were pain in the anterior part of right knee joint associated with swelling, stiffness, burning sensation, crepitus and difficulty in walking since 1 year. Two years back this apparently normal female patient had a fall from truck and got pain in right knee joint and consulted allopathic doctor and took medicines, she got symptomatic relief by that. One year back one day suddenly she got pain in the same knee, which was of pricking type along with burning sensation, swelling, stiffness and difficulty in walking, and while walking she felt catch away sensation. Then she consulted allopathic hospital and MRI was taken and diagnosed as chondromalacia patella, she took treatment but no relief was found and approached at Sri Jayendra Sarswathi Ayurveda College on 20/01/2020 for Ayurvedic management.

### EXAMINATION:

#### Clinical findings:

#### General examination

Bowel : Loose 2-3 times per day  
Appetite : Normal  
Micturition : Normal  
Sleep : Normal

Parameters	Right Knee Joint	Left Knee Joint
Pain	Present	Absent
Swelling	Present	Absent
Temperature	Absent	Absent
Crepitus	Present (Grade 3)	Absent
Discolouration	Absent	Absent
Restricted ROM	Present (flexion)	Absent
Tenderness	Present	Absent

**Grab sign** : Positive  
**Clark's test** : Positive  
**Mc Murray test** : Negative  
**Anterior Drawer Sign** : Negative  
**Posterior Drawer sign** : Negative

Right Knee Joint

### MRI- Right knee- findings

Minimal fissuring/fraying of articular cartilage in superior aspect of patella. Mild knee joint effusion. Suggestive of grade 2 hondromalacia patella.

### Treatments given

#### Internal medicines:

- Manjistadi kashayam* 15ml- 0-15 ml with 45 ml boiled and cooled water B/F (for 1<sup>st</sup> one week)
- Dhanwantaram kashayam* 15ml-0 -15 ml with 45 ml boiled and cooled water B/F
- Vilwadi Gutika* 1-0-1 with honey A/F
- Kseerabala (101) cap* 1-0-1 A/F
- Laksadi gulgulu* 1-0-1 B/F with *kashayam*

#### External treatments

- Sthanika Lepam* with *jatamayadi'* *choornam* with warm water OD for 10 days from 21/01/2020
- Sthanika Dasamoola kseera dhara* for 1<sup>st</sup> 3days (21/01/2020) OD
- Sthanika Abhyangam* with *kseerabala tailam* followed by *Dashamola ksheera dhara* for 7 days (24/01/2020)
- Sthanika Pizhichil* with *mahanarayana tailam* for 7 days (27/01/2020)
- Januvasti* with *mahanarayana tailam* for 7 days (27/01/2020)

#### Yogavasti (from 24/01/2020)

*Anuvasanam: vidaryadi grutam* with *yastitailam* 60ml  
*Niruha vasti : Honey* 60ml  
*Saindavam* 10gm  
*Erandamoolam+ dasamoolam kashayam* 300ml  
*Sneham: vidaryadi grutam+ yasti tailam* 60ml  
*Kalkam: satapushpa* 15gm

### DISCHARGE MEDICINES

#### Follow up medicine:

*Indukanta grutam* 5ml morning empty stomach B/F  
*Chyavanaprasham* 5gm morning B/F  
*Dhanwantaram kashayam* 15ml evening B/F  
*Kseerabala (101)* 1-0-1 a/f  
*Laksadi gulgulu* 1-0-1 a/f  
*Murivenna* for bandaging

#### Outcome of the treatment:

Patient assessed outcome:

- Pain was absent completely.
- Burning sensation was absent
- Stiffness got reduced considerably

Clinician assessed outcome:

- Tenderness Absent :Grade III to grade 0
- Grab sign: Negative
- Swelling : Absent
- Crepitus : Reduced from grade III to 1
- Range of movement(flexion): improved

#### DISCUSSION :

The patient was having classical *lakshanas* of *janu sandhigata vata* like *vedana* during *aakunchana* (flexion), *shotha*. Along with these *lakshanas* patient was also having burning sensation and stiffness. Here in this case the burning sensation or *daha* can be attributed as *pitta anubandhatwam* and stiffness or *stambha* can be understood as a *vata prakopa lakshana* caused due to *ruksha* and *sheeta guna vrudhi*. Hence in the present case there is *vata pitta vrudhi* and *kapha kshaya*. In chondro malacia the softening of articular cartilage is happening followed by degeneration. The *slesaka kapha* having the action of *sandhi samslesana* is undergoing *ksaya* and leads to *sandhi saithilya*. On *guna vikalpna*, it is understood that there is *vrudhi* in the *ruksha sheeta guna* of *vyana vata*, *ushna guna vrudhi* of *pachaka pitta* and *snigdha sthira guna kshaya* of *shleshaka kapha*. The *pitta dosha prakopa* is caused due to the *aashaya apakarsha gati* of *vyana vata* thereby dislodging the *pachaka pitta* from *koshta* to the *janu sandhi*. As a consequence the patient was having *agni sada* in the form increased frequency of loose stools. Hence the case was finally diagnosed as *janu sandhigata vata* with *pittanubandha*.

In the above case patient presented with severe knee joint pain along with burning sensation. Considering *pittanubandhatwa* along with *vatakopa*, *jatamayadi choorna* has been given as it is *pittahara*. And for immediate pain relief *dasamoola kseera dhara* which is having the property of *sadyasoola nivarana* mentioned in the context of *vatarakta* was given. Initially for *amapachana* as well as *agnideepana vilwadi gulika* was given and in this case patient is having loose bowels along with increased frequency. As hyaline cartilage is avascular and due to injury proper nourishment will not get so *manjistadi kashayam* is having *rakta prasadana* action and for improving circulation *manjistadi* is selected and it helped in curing burning sensation. Then *yogavasti* done with *vidaryadi grutam* and *yasti tailam* as *amuvasana* as it is *vatapittahara*, *balya* and *niruham* with *erandamooladi* and *dasamoolam kashayam* for pacifying *vata*. Along with *yogavasti*, *pizhichil* and *januvasti* with *mahanarayana tailam* which is *brumhana*, *balya* and *vatahara* was administered.

#### CONCLUSION:

Chondromalacia patella is characterised by softening and destruction of hyaline cartilage. In Ayurveda it can be understood as *janu sandhi gata vata* with *pittanubandhitwam*. The *guna vikalpna* in this case can be understood as *ruksha seeta usna guna vrudhi* and *snigha* and *sthira guna ksaya*. The treatment protocol adopted in this case was *kostagata amapachana*, *pittasamana chikitsa* in *janu sandhi* followed by .There was significant improvement in subjective and objective parameters after a course of 17 days of treatment.

#### REFERENCES

1. Iraj Salehi-Abari, Shabnam Khazaeli, Ali Niksirat. Chondromalacia Patella and New Diagnostic Criteria. Open Science Journal of Clinical Medicine. Vol. 3, No. 4, 2015, pp. 126-128.
2. Habusta SF, Griffin EE. Chondromalacia patella. [updated 2019 Dec 21]. In StatPearls [internet]. Treasure island (FL): Statpearls publishing 2020 Jan
3. Acharya vagbata, Astanga hrudayam, Sarvanga sundari commentary, Chaukambha orientalia reprint edition 2005, Nidana sthana, 15th chapter- pg no.531
4. Ramanivas sharma. Sahasrayogam. : Chaukamba Sanskrit pratishtan; 2007. p. 80