Ayurvedic Management of Kroshtukasheersha (Chronic Synovitis of Knee Joint with Effusion) - A Single Case Study

P. Srikanth Babu¹G.Sreedevi²Sk.Rajimunnisa Begam³ D R Sunil Kumar⁴

¹Professor & HOD, Dept of Kayachikitsa, Dr.B.R.K.R.GovtAyurvedic College, Hyderabad, Telangana, India. ²Pg Scholar Dept of Kayachikitsa, Dr.B.R.K.R.GovtAyurvedic College, Hyderabad, Telangana, India. ^{3,4}Assistant Professor Dept of Kayachikitsa, SJG Ayurvedic Medical College, Koppal, Karnataka, India.

Abstract: Kroshtukasheersha is described by AcharyaSushrutha as a vatavyadhi¹ can be compared with Synovitis of Knee Joint with Effusion in modern terminology. There are multiple causes for the swelling which includes arthritis, injury to the ligaments or meniscus. As per Ayurveda Vata and Raktadoshaare predominantly involved for the manifestation of the disease. Localization takes place in the knee joint causing swelling which appears like the head of Jackal and makes the patient difficult to walk due to the severity of pain. In the present clinical study we have selected a combination of ShamanaAushadies namely Chopinchyadhichurna, SameerapannagaRas, Pravalapishti, TriphalaGuggulu,GugguluTiktakaGhrtam. The outcome of the study revealed good therapeutic efficacy and no further accumulation of fluid was seen in follow up.

Date of Submission: 30-12-2019

Date of Acceptance:-14-01-2020

I. Introduction:

Indulgence in specific etiological factors cause simultaneous vitiation of *Vata* as well as *Raktadosha* afflicting the region of knee joint causing severe pain and swelling which appear like the head of Jackal for which it was given with that name *Krostukasheersha*. *Bhavaprakasha* called it with the name *Jambookamasthakam* and described the treatment as to be done similar to *Vatarakta*.^{2,3}The presenting symptoms include severe pain which causes difficulty in walking, and the large swelling due to accumulation of fluid causes heaviness of the joint. It can be compared with Synovitis of Knee Joint with Effusion, Monoarthtritis of knee joint in modern terminology. There are multiple causes for the swelling, including rheumatoid arthritis, injury to the ligaments or meniscus. The commonest mode of management for chronic synovitis of knee joint is through resecting the inflamed synovium. The operations include open synovectomy and arthroscopic synovectomy.

II. Case Study:

Materials and Methods:

Place of study: OPD Dept of *Kayachikitsa*, Dr. B.R.K.R. Govt. Ayurvedic Hospital and Research Centre, Erragadda, Hyderabad, Telangana, India, 500038

Chief Complaints:

A 48 years old female with OPD number 5352 came to Dr BRKR Ayurvedic Government Hospital, Erragadda, Hyderabad with complaints of severe pain, tenderness, swelling, local rise of temperature of left Knee joint since 8 years.

Associated Symptoms: constipation since 1 year

History of present illness: Patient was apparently normal 8 years back, later developed pain in the left knee joint along with swelling. The pain increased gradually and became severe and lead to difficulty in proper flexion and extension, finally caused gait disturbance. Patient had taken Allopathic treatment asNSAIDS, got multiple aspirations a total of 34 times done and could get only temporary relief, as the swelling usually reoccurred within 3-4 days after aspiration. Then patient had visited for Ayurvedic Hospital for better management.

Past History: No H/o of DM/HTN/CAD/CVA. No previous surgical history

On examination (left Knee joint):

Pain +++ ,Swelling +++,Local rise of Temperature +

Measurement of Left Knee joint: 41cm, 42cm, 34cm (Above the Knee Joint, Middle and below the Knee Joint respectively)

Gait: Limping gait

Systemic Examination: Lungs: BAE +, CVS: S1S2 +, GIT Examination: No Abnormality Detected

Tableno.1 showing Personal History:

Name : ****	Bala: Madhyama	Prakriti: Vatakapha
Age/Sex: 45 years/female	Sleep: Disturbed	
Marital Status: married	Bowel Habit: Constipated	
Occupation: Housewife	Appetite: Decreased	

Tableno.2 showing AshtaSthanaPariksha:				
Nadi : 78/min,VataKaphaja	Sabda: Prakrutha			
Mootram: Prakrutha	Sparsha: UshnaSparsha (Local rise of temperature in left knee joint)			
Malam:Vibanda	Drik: Prakrutha			
Jihwa : <i>Prakrutha</i>	Akriti: Madhyama			

....

Diagnostic Criteria:

Subjective Parameters:

- 1. Sandhisoola
- 2. Sandhistabdata
- 3. SandhiUshnata
- 4. Gait

Tableno.3 showing the grading of subjective parameters

S.no	Subjective parameters	G-0 Normal	G-1 Mild	G-2 Moderate	G-3 Severe
1.	Sandhisoola	Absent	+	++	+++
2.	Sandhistabdata	Absent	+	++	+++
3.	SandhiUshnata	Absent	+	++	+++
4.	Gait	Normal gait	Mild abnormality of gait	Moderate abnormality of gait	Limping

Objective Parameters:

1. Swelling measurements at the left knee joint

Treatment Plan:

Patient was treated on O.P.D basis with oral medications

- 1. A. Chopichinyadhichurna 60gms
 - +
 - B. Sameerapannagaras 10 gms
 - $^{+}$ C. PravalaPishti 10gms

All the 3 ingredients are thoroughly mixed and divided into 90 parts and 3 parts of medicine is given per day that accounts single part thrice daily and Honey as anupanaafter food.

- Cap. GuggulutiktakaGhritam 2tab p/o Bd 2.
- Tab. TriphalaGuggulu 2tab p/o TID 3.
- 4. Freelax Granules 5gms H/s

All the medicines were prescribed for a period of 30 days, and patient was asked for routine check-up after 15days of starting treatment.

Pathya: Carbohydrate and leafy vegetables, Fiber rich foods, Shunti, Required amount of fluids orally.

Apathya: Day sleep, Curd, Vyayama, Kuluttha,etc

Treatment Period: 22/2/19 to 23/3/19.

Follow up: Every 30 days after treatment

III. Observations & Results:

Paramet	er	Before Treatment	After Treatment	Follow Up	
1.	Sandhisoola	Grade -3	Grade-0	Grade-0	
2.	Sandhistabdata	Grade -3	Grade-0	Grade-0	
3.	SandhiUshnata	Grade -3	Grade-0	Grade-0	
4.	Gait	Grade -3	Grade -1	Grade-0	

Tableno.4 showing Subjective Parameters before, after treatment and follow up:

Classical gradings for Sandhisoola, SandhiStabdata and SandhiUshnata were taken for grading and observational purpose. As per the subjective parameters before and after treatment there is marked relief in the symptoms and there is no relapse even during follow up.

Table no.5 showing	Objective	Parameters	before, after	treatment	and follow up:
Table no.5 showing	Objective	1 al aniciel 5	beiore, arter	ti catiliciti	and tonow up.

Parameter	Before Treatment	After Treatment	Follow Up
1.Measureement of swelling in the left Knee joint	41cm	38cm	38cm
Above the Knee Joint, Middle and below the Knee	42cm	37cm	37cm
Joint respectively)	34cm	33cm	33cm

Images of Knee Joint Before and After Treatment:



IV. Discussion:

The patient was advised to take the medicines for 30 days as per schedule and *Anupana* along with the *Pathya* and *Apathya*. The main ingredients in *Chopichinyadhichurna*incude*chopichini*(Smilax china), *Pippalimoola*(Piper longum),*Kokilaksha*(Asteracanthalongifolia),*Shunti*(ZingiberOfficinalis). Chopchini acts as anti-inflammatory, antioxidant, analgesic.*Pippali* is best used as Rasayana purpose for healthy maintain of synovial membrane as well *Pippali* has the properties of anti-oxidant and anti-inflammatory activities. *Kokilaksha* is best against the diseases causing due to combination of morbid *vata* and *rakta* and it aslo helps in alleviating the symptoms of inflammation caused due to RA, Gout. *Shunti*contains Gingerols, the phenolic compounds which are responsible for its pungent taste which helps in treating inflammatory disorders such as arthritis⁴. The potent anti-arthritic effects of the extracts of ginger have been proven for its anti-inflammatory activities. *Sameerapannagaras* is used in chronic cases of Joint disorders and is *tridoshashamaka* mainly *vata* and *kapha*dosas, as there is swelling due to accumulation of fluids which cannot be formed without *Kaphadosa*, Sameerapannagaras can show a great role in this aspect⁵. *Pravalapishti* is *tridoshasamaka* it is

indicated for *snayugatarogas* which can strengthen the ligaments around the joints and by virtue of Calcium content in medicinal form it has properties of *vatahara* which is highly useful in degenerative joint disorders⁶. *Triphalaguggulu*by virtue of its constituents is having the properties of *Rasayana* and is indicated in Joint disorders especially in inflammatory conditions. *Guggulutiktakaghritam*, classical preparation in AstangaHrdaya is indicated in*asthi* and *snayugatarogas* which acts as *vatahara*, useful in *dhatukshaya* conditions and also for reducing inflammation. Freelax granules were given as symptomatic treatment for constipation, 7 days after regular use she felt better in passing stools⁷

V. Conclusion:

Sinoarthritis of Knee Joint with effusion is compared with Kroshtukaseersha of Ayurveda, treated with the combination of Rasa aushadies and classical Herbal preparations as described above showed good efficacy and no further accumulation of fluid was seen during follow up. Further research can be done in the form of clinical trial to establish the efficacy of the above said combination of ShamanaAushadies.

References:

- [1]. SushruthaSamhitha Vol-1 Nidanasthana 1/76 by Prof. G.D.Singhal and collegues, Chowkambha Sanskrit Pratishtan, Delhi.
- [2]. Bhavaprakasha of Bhavamishra Translated by Prof K.R. Srikanta Murthy MadhyamaKhanda 24/157 ChowkambaKrishnadas Academy
- [3]. Bhavaprakasha of Bhavamishra Translated by Prof K.R. Srikanta Murthy MadhyamaKhanda 24/157 ChowkambaKrishnadas Academy
- [4]. Siddhyogsangrah by YadavjiTrikamj I ShriBaidyanath Ayurveda Bhawan Ltd. edition 2003; 158: 159.
- [5]. BhaishajyaratnavaliSnayurogachikitsaprakarana 82/13-15 by Kaviraj Shree AmbikaDuttaShasthry, ChowkambhaPrakashan, Varanasi Edition:18.
- [6]. SarangdharaSamhitha translated by Himsagara Chandra Murthy 7TH Chapter Pg188 Published by Chowkambasanskrit series office.
- [7]. Vagbhata A.H with SarvangaSundara commentary edited by Harisastryparadkar 7th edition ChowkambaOrientalia 1982 pg 726,727.

P. Srikanth Babu,et.al. "Ayurvedic Management of Kroshtukasheersha (Chronic Synovitis of Knee Joint with Effusion) - A Single Case Study." *IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS)*, 15(1), (2020): pp. 09-12.