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Case Report

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ANKYLOSING SPONDYLITIS – A CASE REPORT

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ABSTRACT

Ankylosing spondylitis is an inflammatory disorder of unknown cause that primarily affects the axial skeleton; peripheral joints and extraarticular structures are also frequently involved. According to Ayurved ankylosing spondylitis can be correlated with *Asthimajjagatavata*. It is described under the category of *Gatavata* explained in *Vatavyadhi* of Charak Samhita. The symptoms depending upon the *Gati* of vitiated *Vata* and its *Sthanasanshraya* in a particular site. There is a *Bheda* of *Asthi Parva, Sandhishula, Kshaya* in *Mamsa* and *Bala* and patient is sleepless having continuous pain. HLA B-27 positive patient came in our institute having complaints of pain and swelling at bilateral knee joints, evening rise of fever, weight loss, *Chakraman Kashtata*,

Asanuthapankashtata etc. By using Ayurvedic concepts we managed with Rasapachak and Asthimajjapachak Kvatha, Janudhara, Dashanglepa, Panchatiktakshir Basti, Vaitarana Basti, Jalokavacharana and some Shaman drugs. Observation and result were obtained encouraging and assessed on different parameters which are presented in full paper.

KEYWORDS: Ankylosing spondylitis, *Janudhara, Dashangalepa, Panchatiktakshir Basti, Vaitarana Basti.*

INTRODUCTION

Ankylosing spondylitis is defined by the presence of sacroilitis on x-ray and other structural changes on spine X-rays, which may eventually progress to bony fusion of the spine. Upto 40% of patients have peripheral musculoskeletal asymmetrical lesions affecting entheses of large joints, such as the hips, knees, ankles and shoulders. Fatigue is major complaint but its cause is unknown. Acute anterior uvelitis is the most common extra-articular feature, which

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occasionally precedes joint disease. The symptoms of the disease initially are usually noticed in the late adolescence or early adulthood. The initial symptoms is usually dull pain, insidious in onset felt deep in the lower lumbar or gluteal region. HLA B-27 plays a direct role in ankylosing spondylitis pathogenesis but its precise role at the molecular level remains unresolved. Rats transgenetic for HLA B-27 develop arthritis and spondylitis. A long acting NSAIDs at night is helpful for alleviation of morning stiffness. Corticosteroids and various disease modifying antirheumatic drugs (DMARDS) are used to treat ankylosing spondilitis.

However, these drugs are of limited benefit. Corticosteroids are associated with numerous side effects, especially when given systemically over long periods of time. No effective disease modifying treatment has been established for ankylosing spondilitis. Largest number of *Vyadhi* in Ayurved are *Vatavyadhi* having dominant role of *Vata Dosha*. according to Ayurved ankylosing spondylitis can be correlated with *Asthimajjagata Vata*. In *Asthimajjagatavata Kshaya* of *Asthi and Majja* is found. *Dhatukshayatmak Samprapti* is done with *Nirupstambhit Vata* in *Asthi-Majjagata Vata*. ^[3] According to Charak *Gata Vata* is a pathological condition of *Vata Dosha* where in the vitiated *Vata* gets lodged in the *Asthi* and *Majja Dhatu* and manifest the disease. ^[4] When the vitiated *Vata* gets *Sthansanshray* in *Asthi* and *Majja; Asthi Bheda, Parva Bheda, Sandhi Shula, Mansa Kshaya, Bala Kshaya, Nidra Nasha* and continuous *Shula* these symptoms are agrivated. ^[4] According to Sushrut when vitiated *Vata* is lodged in *Asthi* and *Majja; Asthi Shula* and *Asthi Kshay* are the main symptoms present in particular *Vyadhi*. ^[5]

Vagbhat stated that Vitiated *Vata* seated in *Asthi* and *Majja* gets *Asthi*, *Sandhi Shula*, *Balakshaya*, *Stabdhata*, *Soushiryata* and *Nidranasha*.^[6] Charak stated that *Ruksha*, *Shit*, *Alpa and Laghu Ahar*.^[7] *Langhan*, *Ativyayam*, *Dhatukshaya*, ^[8] *Vegavidharan*, formation of *Ama*.^[9] These factors are responsible for *Asthimajjagata Vata*.^{[7][8][9]}. Charak stated two main cause of *Vataprakopa* as *Dhatukshayajanya* and *Margavarodhajanya*.^[10] *Atisevan* of *Dhatukshaya Janya Ahar- Vihar*, vitiated *Vayu* mixed with *Ama* and *Sthansanshraya* in *Ubhay Janu Sandhi*.^[11]

Charak mentioned the treatment of *Asthimajjagatavata* as *Bahya-Abhyantara Snehapan*. [12]

A case profile

A 21 year male HLA B-27 positive patient came in our institute for management. He had complaints of pain and swelling at bilateral knee joints, rise of fever in evening, weight loss, *Chakraman Kashtata*, *Asanuthapankashtata* since 2 months. Patient was taking DMARDS, Steroids but he was not having relief, so he came in our institute for treatment.

Past illness: No history of past illness.

Past medicinal history: Patient was taking tablet Saaz 100mg 1 B.D., tablet Lonol er 650mg 1B. D., tablet Donica SR 75mg 1O.D., inj. Depo-Medrol 120 mg stat., tablet Rabimac DSR 1O. D.

Present medicinal history: No

Past hospitalization: Admitted in IGMC, Nagpur 8 years ago for Right leg muscle cramp.

Family history: No specific.

Personal habit; Ahar: Katu Rasa Pradhan, vegetarion, Vishamashana.

Vihar: Work in automobile shop standing work 8 hrs/day.

Ashtavidh Parikshana

1. Nadi: 90/min regular.

2. Mala: Samyak Malapravrutti.

3. Mutra: Samyak Mutrapravrutti.

4. Jivha: Sama.

5. Shabda: Spashta.

6. Sparsha: Samashitoshna.

7. Drika; Aspashta.

8. Aakriti: Krisha, Underweight BMI – 15.38

Urah Avum Udar Parikshana

Urah Parikshana: Dosen't reveal any abnormality. B.P.: 110/80 mm of hg, HR- S1 & S2-WNL.

Udar Parikshana: Shape of abdomen – Normal. P/A- Liver- Soft and NP, Spleen- NT, NP.

Hematological examination

CBC and ESR: CBC-Hb%- 12.6gm.,TLC-7700/cumm, ESR- 70 mm/hr.

Blood sugar level: BSL, Fasting: 91mg/dl., Post-prandial: 136 mg/dl.

KFT: Blood Urea -26.5mg/dl., Serum Creatinine -0.80mg/dl., Uric Acid -4.5mg/dl.

HLA- B27: Positive.

Mountoux Test; Negative.

R.A. Factor: Negative.

T.B. PCR: Negative.

CRP: 110.8 mg/l.

Widal Test: Negative.

HBSAg: Negative.

Urine examination: Within normal limits.

Radiological examination: MRI of Pelvis and both hip joints: Finding s/o sacroillitis.

Management

- 1. Nidan Parivarjan and Pathyapathya were explained and patient was observed closely.
- 2. Initially the combination of *Asthimajja* and *Rasa Pachak Kvatha* 40 ml BD for 5 days was Given to increase *Dhatvagnimandya*.
- 3. Janudhara with Til taila 20 min OD for 15 days over left knee joint.
- 4. Dashanga Lepa locally over both knee joint for 15 days.
- 5. Jallokavacharana for reducing Shotha and Shula stat 30 min over right knee joint.
- 6. Panchatiktakshir Basti and Vaitarana Basti was given alternate day OD for 15 days.
- 7. Jallokavacharana over left knee joint stat for 30 min.
- 8. Tab. Nucort OA 1BD, Tab. Trayodashang Guggul 2 TDS, Cap. Repair 1BD and
- 9. Syp. Immudab 10 ml BD was given for 15 days from 6th day.

OBSERVATIONS AND RESULTS

Table 1: Table showing the effect of therapy on pain by visual anologus scale (VAS).

Parameter	B.T.	A.T.	
VAS	06	02	

Table 2: Table showing the effect of therapy on gals examination before and after treatment.

SN	Joints		Pain	Tender	Swelling	Temp	Movement	Crepitus	
1.	Knee	B.T.	Right	+++	+++	+++	+	Restrictied	+
		A.T.		-	-	-	-	Restriction	
								decreased	_
		B.T.	Left	++	++	++	+	Restricted	+
		A.T.					Restriction		
				-	-	-	1	Decreased	-

Normal

Normal

6.

7.

Ankle

Babinskis sign

Lubic	Tuble 5. Tuble blowing the effect of therapy on deep tendon reflex (BTK).					
SN	Reflexes	Left (BT)	Left (AT)	Right (BT)	Right (AT)	
1.	Biceps	++	++	++	++	
2.	Triceps	++	++	++	++	
3.	Supinator	++	++	++	++	
4.	Brachioradialis	++	++	++	++	
5.	Knee	+++	+++	++	++	

Normal

Table 3: Table showing the effect of therapy on deep tendon reflex (DTR).

Table 4: Table showing effect of therapy on dimensions of bilateral knee joints.

Normal

SN	Dimensions	BT Right	BT Left	AT Right	AT Left
1.	Middle Knee Joint	33 cm	33 cm	31.5 cm	31.5 cm
	5 cm Above Knee Joint	31 cm	32 cm	30 cm	29.5 cm
	5cm Below Knee Joint	29 cm	30 cm	28.5 cm	28.5 cm

DISCUSSION

Ayurvedic concept suggests to treat *Vata Vyadhi* by considering the state of disease viz. *Dhatukshaya* and *Margavarodhjanya* depending on status of vitiated *Dosha*, *Dushya* and *Adhisthana*. Keeping this concept of management in mind, the said patient was treated. In this patient ankylosing spondylitis was manifested due to *Dhatukshaya*. *Sandhishula*, *Sandhishotha*, *Mansabalakshaya*, *Satata Ruk*, *Nidranasha* were found in this case might have been resulted due to *Dhatukshaya* of *Asthi- Majja Dhatu*. Obstruction of *Rasa Dhatu* might have lead to *Dhatukshaya* of further *Dhatu* with respect to *Kedarkulyanyaya*. [13]

Symptoms of Asthi and Majjagata Vata were found dominantly in this case.

Considering the fact that the manifestation of ankylosing spondylitis in this patient was mainly due to obstruction of *Rasa Dhatu*. *Dipan* and *Pachan* drugs were given to improve the *Dhatvagni*. To reduce the obstruction *Sthanik Jalaukavacharana* was done and the local pain and stiffness that relieved up to some extend was noted immediately after *Jalaukavacharana*. But the nourishment of that affected joint in terms of *Rasa*, *Rakta*, *Asthi*, *Majja* and *Mansa Kshaya* was also aimed along with correction of alleviated *Vata*. So *Asthi- Majja- Rasa Pachaka Kvatha*, *Panchatikta Kshir Basti* and *Vaitarana Basti* were administered alternate day for 15 days. Some Shaman drugs were also given in this case along the duration of treatment. This line of treatment in this patient was turned to be successful.

After treatment assessment on VAS, GALS, Odema measurement were also noted to be positively improved.

CONCLUSION

The combination of this *Ayurvedic* treatment can be helpful in treating the case of Ankylosing spondylitis, however the trial was on only one patient and multiple such cases can be taken for study by similar line of management to establish the result.

REFERENCES

- 1. Kasper. D. L.: Harrison's Medicine book, 2008; 17.
- 2. Kasper. D. L.: Harrison's Medicine book, 2008; 17.
- 3. w.w.w. ayurlog.com.
- 4. w.w.w. easyayurved.com.
- 5. Shukla V.: Charak Chikitsasthana Chaukhamba Sanskrit Prakashan, Delhi, 2016; 680: 28-33.
- 6. Kaviraja A.: Sushrut Nidansthana Chaukhamba Sanskrit Prakashan, Varanasi, 1: 28-219.
- 7. 7. Garde G.: Astang Hridaya Nidansthana Chaukhamba Surbharati Prakashana, Varanasi, 2018; 209: 15-12.
- 8. Shukla V.: Charak Chikitsasthana Chaukhamba Sanskrit Prakashan, Delhi, 2016; 677: 28-15.
- 9. Shukla V.: Charak Chikitsasthana Chaukhamba Sanskrit Prakashan, Delhi, 2016; 677: 28-15.
- 10. Shukla V.: Charak Chikitsasthana Chaukhamba Sanskrit Prakashan, Delhi, 2016; 677: 28-15.
- 11. Tripathi R.: Charak Sutrasthana Chaukhamba Sanskrit Prakashana, Varanasi, 2011; 700: 28-67.
- 12. Tripathi R.: Charak Sutrasthana Chaukhamba Sanskrit Prakashana, Varanasi, 2011; 69: 28-33.