ISSN: 2322 - 0902 (P)
ISSN: 2322 - 0910 (O)

International Journal of Ayurveda and Pharma Research

Case Study

AYURVEDIC APPROACH TOWARDS ANKYLOSING SPONDYLITIS– A CASE STUDY

Nicy Wilson W[1]*, Prashasth MJ[2], Muralidhara[3]

*[1]PG Scholar, [2]Co-Guide & Lecturer, [3]Guide, Professor & HOD, Dept., of PG studies in Kayachikitsa, SKAMCH & RC, Vijayanagar, Bengaluru, India.

ABSTRACT

Ankylosing Spondylitis is a chronic, systemic, inflammatory disease that can cause the vertebrae to fuse in advanced stages. Ankylosing Spondylitis affects men more often than women. Signs and symptoms typically begin in early adulthood. This affects primarily the sacroiliac joints and spine. Certain peripheral joints and tendons can also be affected, and extra-articular manifestations may be present. The HLA B27 gene is commonly present, and there is a strong familial association. Due to the irregular dietary habits and Irregular activities like doing exercise soon after consuming food etc., leads to indigestion and formation of *Amarasa*. Through this article we are going to understand a case of Ankylosing Spondylitis in the line of *Amavata* through detailed history taking the course of the *Samprapti* is understood clearly and treated accordingly. A 37 years old male patient was presenting with the complaints of Low Back Pain associated with stiffness on low back region since 1 and 1/2 years and Neck pain associated with stiffness since 8 years. Though the *Vyakta Lakshanas* were at low back region, the initial *Samprapti* started from the *Ama*, *Ajirna* and so on. So in this case these factors are concentrated, assessed carefully and managed accordingly through various *Abhyantara* and *Bahya Prayogas*. Thereby following observations like reduction in Stiffness and pain, regularized and satisfactory bowel evacuation etc., were noted.

KEYWORDS: Ankylosing Spondylitis; *Amavata*.

INTRODUCTION

Ankylosing Spondylitis is classified along with the Seronegative Spondyloarthritis diseases. Ankylosing Spondylitis is a chronic, systemic, inflammatory disease that affects primarily the sacroiliac joints and spine. Certain peripheral joints and tendons can also be affected, and extra-articular manifestations may be present. The disease typically affects young adults, and there are strong genetic features. The aetiology of Ankylosing Spondylitis remains unclear. As understanding of the cause is incomplete but an aberrant response to infection is thought to be involved in genetically predisposed individual.[1] Around 0.25% population in India is estimated to be affected by these diseases. Early diagnosis is the key to successful management. An Indian study demonstrated diagnostic delay of almost 7 years in cases of Ankylosing spondylitis. The pathogenesis of Ankylosing Spondylitis remains unclear to date. It is assumed to be immune mediated. There is an obvious cytokine role, because patients show improvement with anti–tumour necrosis factor α (anti–TNF-α) agents. As discussed earlier, there is also a genetic component, and the HLA B27 gene is found in more than 90% of patients with Ankylosing Spondylitis, although the incidence varies some depending on the population studied. Spinal and sacroiliac symptoms are typically early and the most prominent. Low back pain is the first symptom in more than 75% of patients. In some patients, the symptoms are more in the buttock. Over time, the patient experiences limited spinal mobility. One of the keys to the diagnosis of Ankylosing Spondylitis is features of inflammatory low back pain exacerbated by inactivity and relieved by movement.[2]

Amavata is a disease in which vitiation of *Vata Dosha* and accumulation of *Ama* take place in joints. *Shamana* and *Shodhana* measures are advised in Ayurveda whereas anti-inflammatory, analgesics, steroids, and disease-modifying anti rheumatic drugs are required for its management as per modern medicine.[3]

Due to the irregular dietary habits and irregular activities like doing exercise soon after consuming food etc., leads to indigestion and formation of *Amarasa*. Further the vitiated *Vata* takes this to various *Kapha Sthans* like *Urah*, *Kantha*, *Shiras, Sandhis* etc, during the course *Amarasa* gets mixes with three *Doshas* and finally becomes *Picchila* and *Kleda*. Even after reaching the *Selshmasthanas*,

Trikasandhi etc. region due to similarity with *Kapha* its intensity in joints increases more and finally causes the disease *Amavata* by causing rigidity in the body.[4]

Through this article we are going to understand a case of Ankylosing Spondylitis in the line of *Amavata* through detailed history taking the course of the *Samprapti*is understood clearly and treated accordingly.

Case Study

Pradhana Vedana

A 37 years old male patient was presenting with the complaints of Low Back Pain associated with stiffness on low back region since 1 and 1/2 years and Neck pain associated with stiffness since 8 years. Patient also had associated complaints like headache occasionally since 4 months, Disturbed sleep since 4-5 years, Irregular bowel evacuation since 5-6 years and Gurgling sound of abdomen since 6-7 years.

Vedana Vruttanta

Gradual onset of pain in cervical region which was radiating till both shoulder region. There was no numbness on both the upper limbs but patient used to feel stiffness more on cervical region. Usually pain aggravates after prolonged work and patient feels relief after taking hot water bath or external oil applications. Initial day's patient ignored the pain, thinking the cause of the pain is due to his tremendous physical exertions related to his occupation. So he managed with certain symptomatic measures at home to get rid of pain. After 2 years (2012) when the patient noticed the intensity of pain was aggravating in the cervical region he went for consultation and was manage conservatively. Through conservative management of neck pain, patient found temporary relief but after some day's patient felt the same intensity of pain persists after his work. Due to his prolonged nature of work patient ignored the pain and managed with home remedies along with certain analgesics.

Before 6 years (2012) patient started noticing pain in low back region. Onset was gradual and the pain was radiating towards left lower limb posterior aspect. Patient initially ignored the pain considering the heavy nature of his work, did some home remedies and managed. But gradually as the intensity of pain was aggravating, patient had a consultation and underwent conservative management. But still the patient didn't find any reduction in his symptom. So again when consulted, he was asked to undergo certain investigations. Based on the findings, patient was asked to undergo surgical management. Patient refused for surgery, went for second opinion and was again managed with conservative measures. But as the intensity of pain was intolerable and as this hampered the daily activities, he finally decided to go for surgery. Thereby lumbar discectomy at L4-L5 was done before 5 years (2013). Post-surgery patient was advised to avoid lifting heavy weights and indulging in excess physical exertions. Though patient reduced the duration of work, he continued carrying weights along with same physical stress and strain persists.

Gradual onset of low back pain associated with stiffness since 1 1/2 years. Low back pain was non-radiating in nature, stiffness was more during early morning times which lasts for more than 2- 2 ½ hours. Patient found reduction in pain and stiffness after taking hot water bath, after sunrise and is also relieved by activity. Low back pain usually worse during night times, with severe intensity where patient cannot sleep in one position for a long time, as patient continuously wants to change the position of lying pattern he had disturbed sleep. Whenever patient gets this stiffness of low back region, he also feels heaviness which was only at low back region.

Patient also complains of headache occasionally since 4-5months, which was very severe in intensity and had no specific time of aggravation and was not associated with nausea or vomiting. Sometimes patient feels headache when the intensity of neck pain aggravates.

Patient also has the complaints of gurgling sound of abdomen since 6-7 years. This sound was present throughout the day irrespective of food intake. Regarding his Bowel habits, regular evacuation is not seen, sometimes patient passes on alternate days with normal consistency and was satisfactory.

General examination found to be well built, well –nourished, afebrile along with all other parameters such as Blood pressure, pallor, cyanosis, oedema, lymphadenopathy, nails to be normal.

Chikitsa Vruttanta

- L4- L5 Discectomy done on 2013
- Conservative managements for cervical and low back pain includes frequent intake of analgesics.

Koutumbika Vruttanta

- He has three sisters, no one in his family is suffering from such illness.

VayaktikaVruttanta

- Diet - Mixed (non- veg : not regularly)
- Appetite - Irregular(moderate)
- Sleep - Disturbed
- Micturition - 4-5/day and 0-1/night
- Bowel - once/ 0-1 days, satisfactory.
- Habits
  - Tea: 0-8 cups per day (not regularly) ,

- Alcohol: 7-10 days/month/irregular since 10 years (Quit before 1year)

Rogi Pareeksha

Samanya Pareeksha

- Built - Moderate
- Nourishment - Moderately nourished
- Pallor - Absent
- Edema - Absent
- Nails - Absent
- Cyanosis - Absent
- Icterus - Absent
- Lymphadenopathy - Absent
- Tongue - Coated
- Temp - Afebrile
- Pulse - 78bpm
- Respiratory rate - 16 /mins
- B.P - 110/70mmhg
- Height - 5.4inch
- Weight - 59Kg
- BMI - 21.8

Atura Karya Desha Pareeksha

Atura Bhumi Desha Pareeksha

- *Jatataha - Jangala*
- *Samvrudhaha - Sadharana*
- *Vyadhitaha - Jangala*

Atura Deha Desha Pareeksha

Ashta Sthana Pareeksha

- *Nadi* - 78bpm
- *Mootra* - 4-5/day and 1-2/night
- *Mala* - Once/1-2 days
- *Jihwa* - *Lipta*
- *Shabda* - *Prakruta*
- *Sparsha* - *Anushna Sheeta*, *Ruksha*
- *Drik* - *Prakruta*
- *Akriti* - *Madhyama*

Dashavidha Pareeksha

- *Prakruti - Vata-Pitta*
- *Vikruti*
  - *Hetu - Mithya Ahara Vihara, Anashana,*
  - prolonged heavy work, lifting heavy weight,
  - *Ati Atapa Sevana*
  - *Dosha - Vata Vrudhi (Sheeta Guna)*
  - *Dushya -Vrudhi Kshaya*
  - *Rasa +*
  - *Asthi +*
  - *Majja +*
  - *Prakruti - Prakruti Sama Samvaya*
  - *Desha - Jangala*
  - *Kaala - VarshaRtu*
  - *VyadhiBala - Pravara*
  - *MahatHetu, Mahat Linga*so *Vyadhi Pravara*
  - *Sara - Madhyama*
  - *Samhanana - Madhyama*
  - *Pramana - Madhyama*
  - *Satmya - Vyamisra*
  - *Satva - Pravara*
  - *Aharasakthi*
    - *Abhyavaranashakthi- Madhyama*
    - *Jaranashakthi - Madhyama*
  - *Vyayamashakti: (Bahya) Pada Gamana Shakti- Madhyama*
- *Anya - Pravara*
- *(Abhyantara) Pravara*
  - *Vaya - Madhyama*

Angapratyanga Pareeksha

Musculoskeletal examination

Gait – antalgic gait

Arms

Inspection

- No muscle wasting
- No skin changes
- No swelling

Palpation

- No warmth
- No Tenderness

Legs

Inspection

- No asymmetry
- No Swelling
- No bony deformity

Palpation

- No warmth
- No Tenderness

Spine Examination

Inspection

- Loss of Lumbar lordosis,
- Scar marks – Present at lumbar region

Palpation

- Tenderness present at L3-L4, L4- L5, L5 - S1 region
- Tenderness noted on both Sacro-iliac joint (more on left side)
- Para-spinal muscle spasm present at lumbar and cervical region

Range of Movements

Cervical spine

- Flexion – possible (not completely)
- extension – possible
- Lateral bending – possible (pain in para spinal area at left side)

Lumbar spine

- Forward bending – Restricted, Painful
- Backward extending – restricted, painful
- Lateral bending –Painful on both sides (Lf >Rt)

SLR test – positive at left side at 65 degrees
Bragard's Test – positive at left side at 65 degrees
Gaenslen's test – positive
Faber's test – positive on left side
Pump Handle test – painful
Pelvic compression test – painful
Distraction Exam - painful
Schober's Test – positive
Lateral Flexion test – positive
Chest Expansion – possible
Occiput to wall distance – normal

Hip Joint

- Flexion – possible (b/l)
- Extension – possible (b/l)
- Abduction – painful on left side
- Adduction -possible
- External Rotation – painful on left side
- Internal Rotation -possible
- Tendelenburg's Test - negative

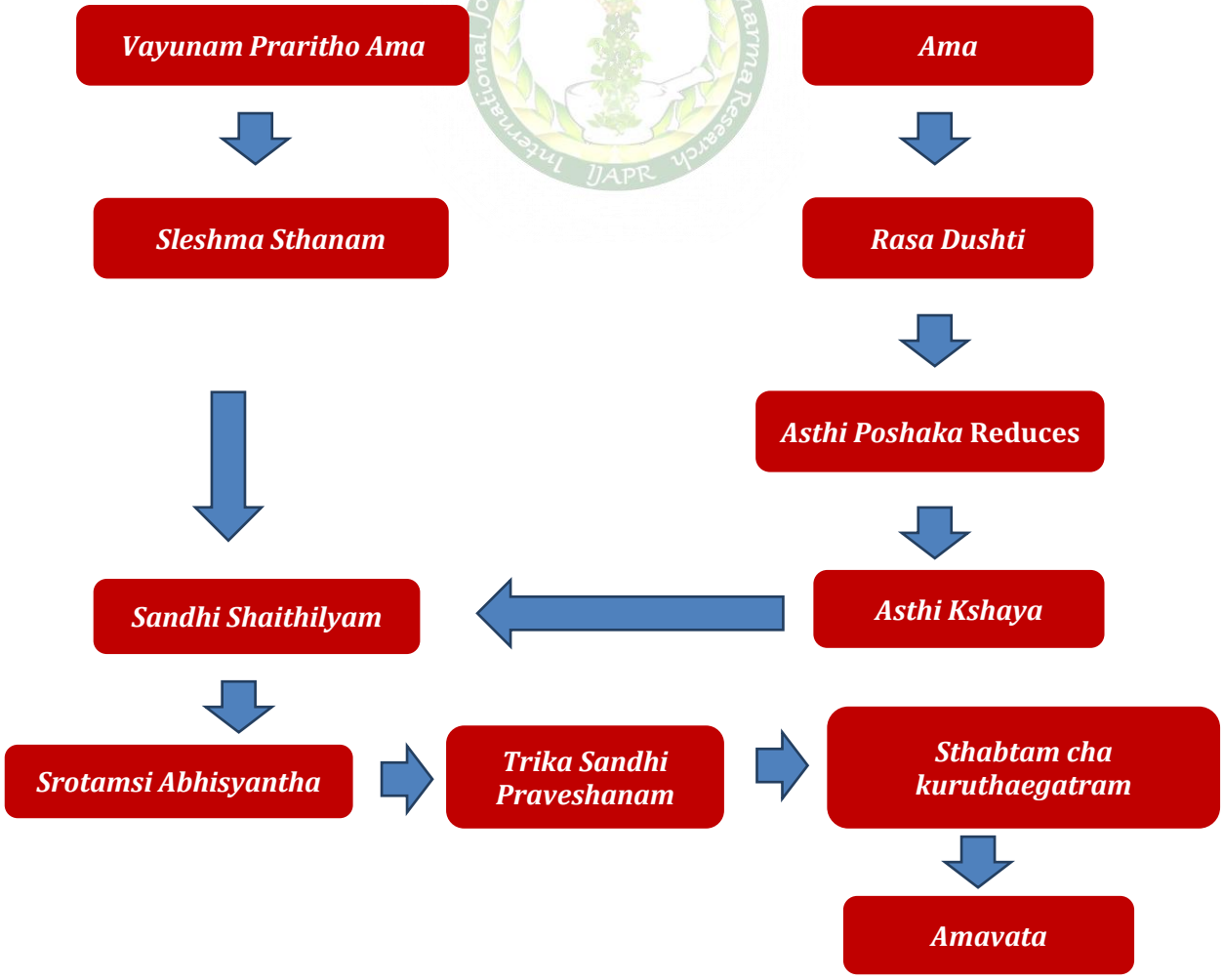
Range of movements of other joint of upper limb and lower limb are possible without pain.

Rogapareeksha

Nidana

- *Ati Vyayama* (prolonged physical exertion)
- *Bhara* (lifting heavy weights)
- *Anashana*
- *Vishamashana*
- *Mutra Vega Dharana*
- *Shoka*
- *Dadhi Sevana*
- *Atapa Sevana*

Samprapti



Sampraphti Ghataka

- *Dosha - Vata Pradhana Tridosha*
- *Dushya - Rasa, Asthi, Majja, Dhamani*
- *Agni - Vishamagni*
- *Ama - JataragniJanya*
- *Srothas - Rasa Vaha, AsthiVaha*
- *Srotho Dushti Prakara- Sanga, Vimarga Gamana.*
- *Udbava Sthana - Amashaya*
- *Vyaktha Sthana - Kati, Sphik, Greeva*
- *Adhishtana - Trika, Dhamani*
- *Marga - Madhyama*
- *Sadhyasadhyatha - Kricchra Sadhya*

Vyavachedaka Nidana

Disease	Inclusion criteria	Exclusion criteria
Pittavrta Vata[5]	*Gatra Vikshepa Sanga*, *Vedana*, *Klama*	*Sarvanga Daha*
Kaphavrta Vata[6]	*Gati Sanga Thatha Adikyam*	*Sarva Gatra Gurutwa*, *Sarva Sandhi Asthi Ruja*
Kaphavrta Vyana[7]	*Sthamba*, *Dandaka*, *Shula*	*Sotha*
Dandaka[8]	*Sthamba* in *Prsta*, *Sroni*	*Sthamba* in *Pani*, *Pada*, *Siras*
Uru Sthamba[9]	*Sthamba*	*Saithyam*
Snayu Gata Vata[10]	*Khalli* (*Uru*, *Khara Mula*)	*Bahya*, *Abhyantara Ayama*, *Kubjatwam*, *Sarvanga Rogam*
Ama Vata[11]	*Ama* (+) along with *Vata–Kapha Sthana-Trika Sandhi Praveshana*, *Sthabdhatwam - Anga Marda*, *Alasya*, *Gourava*, *Apaka*	
Vata Rakta[12]	*Sthabdhatwam–Gambira Vata Rakta*, aversion to cold (*Vataja Vata Rakta*)	*Swayathu* *Daha Paka*
Kati Graha[13]	*Rujam*	*Sthamba* is not a *Lakshana*

Treatment Adopted

Date	Treatment	Internal medications
Day 1	*Sarvanga Dhanyamla Dhara* *Alepa Chikitsa*	*Amavatari Rasa*- 1tid *Chitrakadi Vati*– 1tid Cap. Sal+ - 1tid *Simhanada Guggulu*-1tid *Varunadi Kashaya*- 3tsp +6tsp warm water half an hour before food.
Day 3	***Vaitarana Basti*** ***Anuvasana***- *Brhat Saindhavadi Taila* ***Niruha***– *Guda*-80ml *Saindhava*-6gm *Murchita Taila*-120ml *Gokshura Kalka*- 40gm *Erandamula Kwatha*-100ml *Gomutra*- 100ml *Chincha Jala*- 100ml	

Observation

- Stiffness reduced by 80%
- Pain reduced by 60% in Low back region
- Bowel regularised and satisfactory
- Gurgling Sound reduced by 80%
- Sleep Improved

Discussion

After adopting proper *Rogi Pareeksha* and *Roga Pareeksha* in detail, the pathogenesis of the disease in this patient is understood in following manner.

Stage 1: *Ama*– initially due to the *Nidana* patient was found to have *Samanya Lakshanas* of *Ama* like *Avipaka*, *Anila Mudata*, *Sroto Rodha*, *Gourava*, *Sadana Sarva Gatra* was found which lead to *Vatadi Tridosha Prakopa* in specific *Samavata Lakshanas* like *Agni Sadana*, *Sthamba*, *Antra Kujana*, *Vedana Nistoda*, *Angani Pidayan* were observed. As patient neglected these *Lakshanas*, the *Samprapti* kept continuing leading to the formation of *Ama* at *Dhatwagni* level. Following *Dhatugata Ama Lakshanas* were observed.

Rasa	➢ *Gaurava* ➢ *Angamarda* ➢ *Sroto Rodha* ➢ *Agni Nasha*
Asthi	➢ *Athyasthi* ➢ *Asthi Bheda Shula*
Majja	➢ *Ruk Parvanam*

Stage 2: As patient continued the *Nidana Sevana Lakshanas* of *Ajirna* in specific to *Vishtabdha Ajirna* like *Shula*, *Adhmana*, *Vividha Vata edana*, *Mala Vata Apravrutti*, *Sthamba–Anga Pidayan* were clearly manifested.

As it is mentioned as *Vividha Vata Vedana* where Patient presented with *Greeva Shula* as his *Pradhana Vedana* initially wherein *Mula Karana* was ignored, just concentrated on *Sthanika Lakshana* and was managed conservatively.

Stage 3: But again the complaints of patients relapsed wherein the presentation of *Pakwashaya Gata Vata* was seen in this *Avastha* like *Antra Kujana*, *Shula*, *Krcchra Mutra Pureesha*, *Anaha Trika Vedana*. Again management was done for low back pain, as the *Mula Karana* was ignored, this may be the reason for recurrence of pain.

Stage 4: Now the unresolved *Karana* (*Ama*) started moving from its *Sthana* to other *Sthana* wherein this patient it entered into *Sleshma Sthana* leading to *Sandhi Shaithilya* and on the other side *Ama* leading to *Rasa Dushti* inturn *Asthi Poshaka* reduces leading to *Asthi Kshaya* and again causes *Sandhi Shaithilya*. Further there will be *Srothamsi Abhisyanda* further *Trika Sandhi Praveshaka* and the *Lakshanas* like "*Sthabtham Cha Kurutho Gatram"* was manifested.

CONCLUSION

Though direct correlation was not mentioned for Ankylosing Spondylitis, detailed history taking helped us to understand the flow of the *Samprapti*. On the basis of the signs and symptoms the case was understood wherein the *Mula Karana* was ruled out, managed accordingly in the lines of *Amavata* and marked improvement was noted.

REFERENCES

1. Davidson's Principles and Practice of Medicine, Editors Nicki R. College, Brian R. walker, Stuart H.Raltson, 20th edition, 2010, Chapter 25, Pp: 1360, Pg: 1104.
2. Davidson's Principles and Practice of Medicine, Editors Nicki R. College, Brian R. walker, Stuart H.Raltson, 20th edition, 2010, Chapter 25, Pp: 1360, Pg: 1105.
3. Davidson's Principles and Practice of Medicine, Editors Nicki R. College, Brian R. walker, Stuart H.Raltson, 20th edition, 2010, Chapter 25, Pp: 1360, Pg: 1100.
4. Sri Madhavakara, MadhavaNidana, Madhukosha Sanskrit Commentary of Srivijayaraksita and Srikanthadatta, Chaukhambha Rakashan, Varanasi, Reprint-2013, Part:1, Chapter- 25, Pp:568, Pg: 508.
5. Agnivesha, Caraka Samhita, Ayurveda Dipika Commentary of Cakrapanidatta, Edited by Vaidya Jadavji Trikamji Acharya, Choukambha Krishnadas Academy, Varanasi, reprint-2015, Pp:738, Pg: 619, Chikitsa Sthana, Ch-28, Sloka-61.
6. Agnivesha, Caraka Samhita, Ayurveda Dipika Commentary of Cakrapanidatta, Edited by Vaidya Jadavji Trikamji Acharya, Choukambha Krishnadas Academy, Varanasi, reprint-2015, Pp:738, Pg: 619, Chikitsa Sthana, Ch-28, Sloka-62.
7. Sri Madhavakara, Madhava Nidana, Madhukosha Sanskrit Commentary of Srivijayaraksita and Srikanthadatta, Chaukhambha Rakashan, Varanasi, Reprint-2013, Part:1, Chapter- 22, sloka-26, Pp:568, Pg: 464.
8. Agnivesha, Caraka Samhita, Ayurveda Dipika Commentary of Cakrapanidatta, Edited by Vaidya Jadavji Trikamji Acharya, Choukambha Krishnadas Academy, Varanasi, reprint-2015, Pp: 738, Pg: 619, Chikitsa Sthana, Ch-28, Sloka- 51.
9. Agnivesha, Caraka Samhita, Ayurveda Dipika Commentary of Cakrapanidatta, Edited by Vaidya Jadavji Trikamji Acharya, Choukambha Krishnadas Academy, Varanasi, reprint-2015, Pp:738, Pg: 613, Chikitsa Sthana, Ch-27, Sloka-17.
10. Agnivesha, Caraka Samhita, Ayurveda Dipika Commentary of Cakrapanidatta, Edited by Vaidya Jadavji Trikamji Acharya, Choukambha Krishnadas Academy, Varanasi, reprint-2015,

Pp:738, Pg: 617, Chikitsa Sthana, Ch-28, Sloka-35.

11. Sri Madhavakara, Madhava Nidana, Madhukosha Sanskrit Commentary of Srivijayaraksita and Srikanthadatta, Chaukhambha Rakashan, Varanasi, Reprint-2013, Part:1, Chapter- 25, Pp:568, Pg: 508.
12. Agnivesha, Caraka Samhita, Ayurveda Dipika Commentary of Cakrapanidatta, Edited by Vaidya Jadavji Trikamji Acharya, Choukambha Krishnadas Academy, Varanasi, reprint-2015, Pp: 738, Pg: 629, Chikitsa Sthana, Ch-29, Sloka- 26.
13. Sri Bhavamishra, Bhavaprakasha, Vidyotini Hindi Commentary by Sri Brahma Sankara Misra, Chaukhambha Sanskrit Bhavan, Varanasi, Reprint-2016, Part:2, Chapter-26, Sloka- 53, Pp: 836, Pg: 292.

Cite this article as:
Nicy Wilson W, Prashasth MJ, Muralidhara. Ayurvedic Approach Towards Ankylosing Spondylitis– A Case Study. International Journal of Ayurveda and Pharma Research. 2018;6(4):37-43.
Conflict of interest: None Declared

***Address for correspondence**
Dr.Nicy Wilson
PG Scholar,
Dept. of PG studies in Kayachikitsa,
SKAMCH & RC, Vijayanagar,
Bengaluru, India.
Email: nicy.regis@gmail.com