# Ayurvedic Management of Amsa Marmabhighata W.S.R to Supraspinatus Tendonitis: A Case Report

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#### **Abstract**

Marma is a vital point where prana is situated. It is an anatomical area where the five anatomical structures are collectively present. Maharshi Sushruta has explained 107 marma. These are the places where the prana (Life Force) is said to be situated. Any injury to the Marma points that leads to deformity of the structures, produces the severe pain, loss of movements and even some times there may be a death. Acharya Sushruta described the number of marma in different anatomical parts of the body and also classified individual marma according to the distribution for better knowledge of their sites as - Sakthi, Vaksha, Udaragata, Pristha and Urdhava jatru gata. Pristha gata marma are located in the back of the body. These marmas are Located along the length of the spine and on either side of it. It is said that injury to spinal cord or its supporting structure can cause permanent change in strength, sensation and other body function. Amsa marma is a type of pristhagata marma and its marmaghata can produce Stabdhabahuta (Stiffness of the Shoulder).

Amsa Marmabhighata is a vata vyadhi characterised by shoola and bahupraspandahara. It is paralleled with Supraspinatus tendinitis in modern medicine. Though not a life-threatening condition, it hampers the day-to-day activity of the individual, reducing the quality of life. Here is a case report of, 48yrs female who presented with pain and stiffness in the right shoulder since 3 months which was managed effectively with Marma Chikitsa.

Keywords: Amsa Marma; Supraspinatus Tendonitis; Marma Chikitsa; Panchakarma.

## **INTRODUCTION**

Marma is a vital point where prana or vital energy is located. It is an anatomical area where the five antomical structures Mamsa (Muscles), Sira (Vessels), Snayu (Ligaments), Asthi

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(Bone) and Sandhi (Joints) are collectively present.<sup>1</sup> Marma is in variably made of Panchamahabhutas, these are said to be constituted by three important vital elements vayu, teja, and soma they also contain trigunas namely satva, raja, tama and bhutatmas condition of body, mind and soul.<sup>2</sup> The prana inheres in these locations as a matter of course; therefore, Marmas produce particular complications when exposed to trauma or desired healing based on how they are manipulated.

Etymology of Amsa: अच्

The word Amsa is formed from when the Dhatu Amsa gets mix with Pratyaya 'Ach'. Word Amsa means shoulder (Skandha).

#### Location:

बाहुमूर्धग्रीवामध्येऽसपीठस्कन्धनिबन्धनावंसौनाम, तत्र स्तब्धबाहुता। (सु शा. ६/२६)

अंसौ-स्कन्धौ त्रायुमर्मणी अर्द्धाङ्गुले वैकल्पकरे तत्र बाहुस्तम्भः । (भा. प्र. पू. खं. ३/२३२)

Acharya Sushrutha and Dalhana stated that Amsa Marma is situated between the Bahumurdha (tip of arm) and Greeva (neck), which binds Ansapitha and Skandha.<sup>3</sup> It is two in numbers. According to Acharya Vagbhata it is situated on either side in between the Greeva (neck), Baahu (arm) and Shira (head) which bind the Ansapitha and Skandha. Bhavprakasha explains Skandha as Amsa Marma.

Acharya Dalhana gave his specific opinion on the structure basis that Amsa Marma is "Mamsa Sira Sandhi Hina." Injury to this Marma, results in stiffness of the limb with loss of function. It includes all the soft tissues like muscles, ligaments, tendons etc., which take part in the formation of shoulder joint with scapula. An injury to these structures may cause rupture of the muscles, ligaments resulting in dislocation of joint, which leads to loss of function of the shoulder joint. According to Acharya Vagbhata the injury to Amsa Marma leads to Bahukriyahara i.e., loss of function of upper limb.

External Trauma results in Bahya Marmabhighata to the Amsa pradesha sthitha Marma and the prakupita Vyana vata afflicts sira, snayu, mamsa, asthi, kandara. Thus the afflicted Snayu Marma, a type of Vaikalyahara Marma will manifests Bahupraspanditahara. Acharya Sushrutha explains as "Ansadeshasthito Vayu Shoshayitvama Ansabandhanam, Sira cha akhunchaya Tatrastho Janyatavabahukam" means the condition in which the vitiated Vata localising around Amsa sandhi, dries up the Sleshaka Kapha and constricts the siras resulting in Apabahuka. Apa means Vikruthi or Viyoga i.e, Dysfunction & Bahuhuka meaning arm. It is characterised by Bahupraspanditahara and Shoola (pain).

Due to similarities in clinical manifestation of Amsamarmabhighata, it can be compared with Supraspinatus tendonitis, a musculoskeletal disorder which hampers the daily activities by significant loss of the range of motion of shoulder in all direction. It involves inflammation of supraspinatus tendon.

Aches related to musculo-skeletal system are common. Shoulder joint has the greatest range of motion among all joints in the human body. Shoulder pain is a common musculoskeletal complaint in the general population. Rotator cuff problems are among the most common causes of shoulder pain seen in primary care practices. The prevalence of shoulder pain in the elderly has been estimated to range from 21% to 27%, and the prevalence of rotator cuff tears increases with advanced age and mostly affects the dominant arm. The rotator cuff consists Supraspinatus, Infraspinatus, Subscapularis, and Teres minor.<sup>4</sup>

Aetiology of supraspinatus injury consists of acute tear and degenerative tear, due to injury or loss of strength, cause the humerus to move superiorly, resulting in impingement, bony structures such as subacromial spurs (bony projections from the acromion), osteoarthritic spurs on the acromioclavicular joint, and variations in the shape of the acromion. When the arm is raised, the subacromial space (gap between the anterior edge of the acromion and the head of the humerus) narrows; the supraspinatus muscle tendon passes through this space. Anything that causes further narrowing has the tendency to impinge the tendon and cause an inflammatory response, resulting in impingement syndrome.<sup>5</sup>

Marma Science is one of the oldest medical science for prevention and cure of diseases, promotion of health. It is more effective as it directly stimulates the vital points. It can be used to detoxify, revitalize and provide strength to the body. The methods of Marma therapy can beclassified into two types,

- a. Pharmacological (with medicine)
- b. Non Pharmacological (without medicine) The present case was successfully managed with Marma therapy *i.e,* taila seka, Upanaha and Patrapottali Sweda, the pharmocological techniques which help in stimulating and affecting the Marma points to attain desired healing.

### CASE REPORT

*Chief Complaint:* Pain in the right shoulder and difficulty in movements of shoulder joint flexion, extension, adduction, abduction since 1 and ½ year.

Associated Complaint: Generalized fatigue, Headache, Occasionally dizziness.

#### H/O Presenting Illness:

Patient was apparently normal before 1 and ½ year after which she developed pain in right shoulder which was sudden in onset, shooting type

preceded by lifting heavy weight subsided soon. After 5 days pain got aggravated for no reason and she noticed swelling over right shoulder, found some relief after applying hot compression over it. She also consulted the physician in her locality and advised to take analgesics but found only temporary relief. Gradually pain increased and now she has severe pain in right shoulder and movements of shoulder joint are restricted because of which is unable to wear clothes and do other daily life activities. Therefore, she approached our hospital for further treatment.

#### Past History:

- k/c/o HTN on amlodipine 5mg OD for last 7 months
- k/c/o hypothyroidism on levothyroxine 12.5 mg for last 5 months
- Medical History: She took allopathic medication and physiotherapy in JSSH for the same complaints.

## Personal History:

- *Diet* mixed, non veg once in week
- · Appetite-good
- *Micturition*-normal in colour, frequency-5-7 times per day
- Bowel- normal, once/day
- *Sleep* disturbed due to pain
- *Habits* coffee 5 time per day
- Marital status- married
- *Menstrual history:* P<sub>1</sub> A<sub>0</sub> L<sub>1</sub> D<sub>0</sub>
- *Menarche-* 12 years of age
- Cycle- regular 28 days once
- *Family history*: Patient sister also k/c/o hypothyroidism

## General Physical Examination:

- Consciousness- alert
- Built- moderate
- Nutrition- normosthenic
- · Pallor- absent
- · Icterus- absent
- · Cyanosis- absent
- · Clubbing- absent
- · Lymphadenopathy-absent

- · Edema- absent
- Pulse-72 bmp
- *BP* 110/70 mm hg
- *Temperature-* 98.3° F
- Weight-70 kg

#### Ashta Sthana Pareeksha:

- Nadi-74 bpm
- Mala- Avishesha
- Mutra- Avishesha
- Jihva- Aliptata
- Svara- Avishesha
- Sparsha- vikruta (tenderness over right shoulder)
- Drik- Avishesha
- Akruti- Madhyama

## Systemic Examination:

- CNS- Conscious and well oriented
- CVS- S1 S2 heard, no murmurs
- RS- NVBS heard, no added sounds

#### Local Examination of Shoulder Joint

## Inspection

Characteristic feature		Right shoulder	Left shoulder
1	Discoloration	Reddish tinge	No discoloration
2	Swelling	Present	Absent
3	Scar	Absent	Absent
4	Wound	Absent	Absent

## **Palpation**

Characteristic feature		Right shoulder	Left shoulder
1)	Tenderness	Present	Absent
2)	Temperature	Increased	Normal
3)	Pain	Present	Absent

#### Range of Movements

Movements	Right shoulder	Left shoulder
Abduction	Possible with pain till 40*	Possible
Abduction	Painful	Possible
Flexion	Possible with pain till 20*	Possible
Extension	Restricted	Possible
External rotation	Restricted	Possible
Internal rotation	Painful	Possible

## Laboratory Investigation:

USG of Right Shoulder - Calcific foci noted with in the substance of supraspinatus and subscapularis muscle

Diagnosis: Amsa Marma Abhighata – Supraspinatus tendinitis

*Therapeutic Intervention:* Marma Chikitsa for 21 days was given as shown in the table,

Treatment	Medicines used	Duration
Seka over Shoulder spica bandage	Murivenna + Ksheerabala taila	For 7 days which was tightened every two days.
Patrapinda Sweda	Vatahara swedaneeya dravya	For 7 days
Lepa & Shoulder Spica Bandage	Kottamchukkadhi churna + Murivenna taila & Eranda patra Lepa	For 7 days

*Shamanaushadhi:* Gandha taila Cap (1-0-1) after food for 20 days after treatment.

## **RESULT**

Subjective Parameters	Before Treatment	After Treatment
Pain (on a scale of 0 – 10)	9	2
Restricted Movements	10	3
(on the scale of $0 - 10$ )		

Objective Parameters	Before Treatment	After Treatment
Tenderness	Grade 4	0
Stiffness	Present	Absent
Local Warmth	Mild	Absent
Discoloration	Present	Absent
	Moderate	Absent
Range of Movements		
a. Abduction	Possible with Pain till 40°	Possible till 70°
b. Adduction	Painful	Possible till 70°
c. Flexion	Possible with Pain till 20°	Possible till 75 <sup>0</sup>
d. Extension	Restricted	Possible
e. Ext. Rotation	Restricted	Possible
f. Int. Rotation	Painful	Possible

#### **DISCUSSION**

Marma are the part of the body which exhibits a peculiar sensation or unusual throbbing and causing pain on pressure. The place of Amsa Marma should be considered in between the shoulder, neck and arm region and the length of Amsa Marma is Ardha Angula. It is Snayu Marma on the basis of Rachana and Vaikalyakara Marma on the basis of Parimana. Parimana of Amsa Marma is Ardhangula and it is two in numbers. An injury to the Amsa Marma cause Stabdhabahuta (stiffness in arm), in the Ashtang Hridaya Samhita, Bahukriyahara (loss of function of the arm) is as Aghataja Lakshana of Amsa Marma.

Injury on the Amsa Marma leads to symptoms such as Stabdhabahuta (stiffness in arm), causing deformity in the arm and the arm does not function properly. An injury to that part of ligaments may leads to rupture of the ligaments resulting in dislocation of the joint, stiffness of the arm and loss of function of shoulder joint. Injury to the Vaikalyakara Marma also leads to deformity of that part. The provoked Vyana Vata may also cause Rukshata afflicting siras resulting in sirasankocha thereby produces Stabhdhata.

Each Marma points are having specific period of time get revive. By this time one should stimulate Marma points in specific therapeutic manipulation. This shows the diverse action and significance of traumatic and therapeutic aspect of a Marma point.

According to GATE control theory by Melzark and Wall<sup>6</sup> pressure given at a certain points transmits pleasurable impulses to the brain and blocks the pain impulse conducted by afferent sensory fiber that is alpha, delta and c fiber to reach the brain. Thus the Marma points situated around the shoulder joint reduces the pain and restricted movement of shoulder joint and diminish the recurrence of diseases.

Murivenna taila is powerful analgesic oil extensively used for traumatic and inflammatory conditions. The drugs of Murivenna have Sandhaneeya property<sup>7</sup>, Seka with Murivenna helps with the rotator cuff injury, Taila is best Vatahara and Brihmana.<sup>8</sup>

Lepa with Kottamchukkadi Choornam helps to alleviate the inflammation and joint pain.<sup>9</sup>

Swedana karma is the process of application of different modes of heat as a therapeutic procedure for reliving stiffness and pain. Snigdha sweda kriyas in the form of Patra pottali sweda increases blood flow, thus easing down the inflammation, and stimulation of the sympathetic nervous system for vasodilation, which leads to revascularization of tendons around the shoulder joint, speeds up the healing process.

Active shoulder exercises was advised after which helps to restore muscle strength and mobility in shoulder joint.

Gandha taila is Uttama Asthi Sthairyakara<sup>10</sup> and it helps to improve bone mass and strength and also helps in preventing further degeneration.

#### **CONCLUSION**

Ayurvedic treatment including manual therapies and Upakramas was used in the instance of management of Amsa Marmabhighata. On treatment patient felt relieved from symptoms like pain, tenderness and she could wear clothes with ease on her own. Hence we can conclude that selection of specific modality and drugs which address the pathophysiology helps to obtain early results. Treatment not only helped in relieveing the symptoms but also significantly improved the Quality of life enabling to resume to daily routine.

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