

PRUSHTHA MARMA AND AMSA MARMAGHATA IN BHUJASTAMBHA (FROZEN SHOULDER) – A RETROSPECTIVE, OBSERVATIONAL, CROSS-SECTIONAL, REVIEW BASED STUDY.

Ram B. Kakade,^{1*} Bhausahab C. Vikhe.²

1. *BAMS, PG Scholar, Dept of Rachana Sharir, PMT's Ayurveda College, Shevgaon, Ahmednagar, India.
2. MD (Rachana Sharir), HOD, Professor & PG Guide, Dept of Rachana Sharir, PMT's Ayurveda College, Shevgaon, Ahmednagar, India.

Received on: 28/09/2020; Revised on: 25/10/2020; Accepted on: 26/10/2020

ABSTRACT

Marmas are certain vital points spread all over human body. 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. *Prushtha Marma* are *Katikataruna*, *Kukundara*, *Nitamba*, *Parshwasandhi*, *Brahati*, *Amsaphalaka* and *Amsa*. *Amsa marmaghat* can be correlated with frozen shoulder due similarity in symptomology. The precise prevalence of FS is unknown, some studies have quoted prevalence of 2%–5% in the general population. A Retrospective, Observational, Descriptive, Cross-sectional study was aimed to study the anatomical and structural changes of *Amsa marmaghat* in *Bhujastambha*. Study carried out in 10 patients as a pilot study prior actual dissertation work. Considering symptoms of *Bahustabdghata* (Frozen shoulder) and *Amsa marmaghat* it was observed that symptoms of both are almost same. Since data was limited statistical analysis was not performed.

Keywords: *Prushtha Marma*, *Amsa Marmaghat*, *Marmaghat*, Frozen Shoulder, Cross-Sectional Study.

1. INTRODUCTION

The human anatomy (*Sharira rachana*) is an integral part of health sciences. Knowledge of *Sharira rachana* is helpful to the physician for his success in the profession. Ancient Acharyas like Sushruta, Charaka and Vagbhata have stressed on *Rachana sharira* when dealing with various diseases. Sushruta had mentioned dead body dissection also.¹ Vital points situated at certain place in human body are called *Marmas*. *Prana* (life force) is said to be situated at *Marmas*.² 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.³ Each and every *Marma* is important clinically as trauma over it leads to pain, deformity, death etc. As per Ayurveda *Marma* are made up of *mamsa*, *sira*, *snayu*, *asthi* and *san-*

dhi. Name to the *Marma* is given after the name of body part, structure or function.⁴

There are 14 *Prushtha Marma* viz. *Katikataruna*, *Kukundara*, *Nitamba*, *Parshwasandhi*, *Brahati*, *Amsaphalaka* and *Amsa*.⁵ Various activities viz. jerk during hard work, playing, actions like swimming, trauma and fall leads to injuries to shoulder joint and its muscles. *Amsa sandhi* and *bahu vikruti* (deformity, disability) is resulted due to such activities. *Amsa marma* is *vaikalyakar marma* (causing deformity). *Amsa marmaghat* can be correlated with frozen shoulder due similarity in symptomology. Frozen shoulder (FS) is commonly present in older population and more in females as compared to males. The prevalence rate of Frozen shoulder is not known actually but few studies mentioned the 2 to 5% general prevalence rate.⁶ Patients of FS with prolonged

*Corresponding Author: Ram B. Kakade. Email: ramkakade22@gmail.com.

shoulder immobility or systemic diseases are always at a higher risk of deformity.⁷

Acharya Sushruta has evolved and explained concept of *Marma* system to help a surgeon for safe surgical practice. Symptomology like *stabdhabahuta* or *bahukriyalpata* is much neglected area in Ayurveda research. Hence there is need for research to evaluate the concept of *stabdhabahuta* symptom in relation with *Amsa Marma* and its surgical and anatomical importance. Till date no study has conducted on *Amsa marma* and its traumatic consequences viz. injury or deformity. In current situation vast treatment modalities are available for FS. But still after treatment some sort of disability remains which is unavoidable. Modern science is also not capable to take care of these disabilities. To clear the scenario and to open new dimensions for scholars, a study of *Marma* and *Amsa marmaghata* was considered for present study.

2. METHODS

2.1. Objectives

- ◆ To study the anatomical and structural changes of *Amsa marmaghata* in *Bhujastambha*.
- ◆ Conceptual study of *Prushtha Marma Sharira* according to Ayurveda as well as modern view.
- ◆ To study the underlying structures of *Amsa marma* according to Ayurveda text.
- ◆ To study the underlying structures of *Amsa marma* according to modern science.

2.2. Research Question

Is there any association in *Amsa Marmaghata* and *Bhujastambha* (Frozen Shoulder)?

2.3. Study design

Present study is Retrospective, Observational, Descriptive, Cross-sectional study carried out as pilot study prior actual dissertation work. Ethical clearance was obtained from IEC of PMT's Ayurveda College, Shevgaon (Ethical Clearance No. PMT/AYU/PG-IEC.RSHR-01). Study was carried out in OPD of Kayachikitsa

and Shalyatantra. Total 10 patients suffering from Frozen Shoulder were study by explaining them nature of study and obtaining informed written consent. After interrogation, structured CRF were filled to gather relevant data.

2.4. Selection of study subjects

2.4.1. Inclusion criteria

- ◆ Patients of either sex irrespective age.
- ◆ Diagnosed patients of *Stabdhabahuta* more than 6 month due to the injuries to *amsa-pradesha*.
- ◆ Patients having clinical features correlated with *snayu marmabhighata lakshana* and *samanya marmabhighata lakshana*.

2.4.2. Exclusion criteria

- ◆ Fracture and dislocation.
- ◆ Tuberculosis of shoulder joint.
- ◆ Congenital elevation of scapula.
- ◆ Non-traumatic conditions and systemic disorders.
- ◆ Immuno-compromised patients.

3. RESULTS AND DISCUSSION

3.1. Discussion on *Amsa Marma*, *Amsa marmaghata* and *Bahustabdhatata* (Frozen shoulder)

Marma are that part of the body which exhibits a peculiar sensation or unusual throbbing and causing pain on pressure.⁸ *Amsa Marma* is situated between the root of the arm on one side and the neck on the other. This ties shoulder and *amsapeetha* together. Here there are ligaments binding the scapula with the clavicle. Injury to this *marma*, results in stiffness of the limb with loss of function. It includes all the soft tissues like muscles, tendons, ligaments 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, that leads to loss of function of the shoulder joint.⁹ *Amsa marma* is a *snayu marma* structurally, based on many references (*shastra charcha parishad*) we can call *snayu* as ligament, somewhere it is considered as nerve or tendon. But

depending upon the situations we can name it to different structures as above said, traumatic effect on *amsa marma* (*snayu*) leads to the functional deformity. So, it is known as *Vaikalyakara Marma*.¹⁰ *Snayu marma* leads to *lakshanas* viz. *Koubjyam* (Shortening), *Sharir avayava saada* i.e. *svakarmanya asamrthyam* (loss of functions), *Kriyasvashaktiriti* (Loss of movements like Abduction, Adduction, Flexion extension etc.), *Ruja* (Pain), *Ayam*, *Akshep*, *Bhujastmbha*.¹¹ Common *marmabhighata* symptoms are *Vicheshтана*, *Urdhvavata*, *Vayukruta tivra ruja*, *Stabdхata*, *Kriyanasha*.¹¹

Frozen shoulder (FS) is scientifically termed as adhesive capsulitis. It is also called periartthritis of shoulder joint. Shoulder joint's movements become restricted gradually. X Ray shoulder joint may show specific, non-specific or no findings in such patients. Patient reports gradual increase in severity of pain and joint movements. He/she cannot sleep on affected as FS progresses further. As per modern science three stages of progress of FS are found mentioned viz. 1. Freezing stage, 2. Frozen stage and 3. Thawing stage. In first stage i.e. freezing stage there is moderate to severe pain and stiffness of shoulder joint with duration of 2 to 9 months. In the second stage i.e. frozen stage shoulder joint stiffness gradually increases with duration of 4 to 14 months. Pain is reduced is reduced here as compared to first stage. The duration of third stage i.e. stage is about 5 to 24 months. Symptoms are relieved gradually and range of motion is improved in this stage.¹³

3.2. General observations

Out of 10 patients 8 patients were above age of 50 years. Old age is *Vata pradhan avastha* of *vaya*, hence trauma over shoulder joint leads to *Bahustabdhata* (Frozen Shoulder) commonly in later stage of age. 6 patients were male while 4 patients were female. 3 patients were having history of heavy weight lifting, 4 patients were having history fall and trauma over shoulder region, 2 patients were having history of trauma in RTA and 1 patient was having history of

trauma by jerk during farm work.

3.3. Symptoms of *Bahustabdhata* (Frozen shoulder)

Out of 10 patients, 5 patients reported Grade 3 pain, 4 patients reported Grade 2 pain and 1 patient reported Grade 1 pain. 3 patients were having Grade 3 shoulder joint stiffness and unable move shoulder joint due to severe pain during movements, 5 patients reported Grade 2 shoulder joint stiffness and 2 patients reported Grade 1 shoulder joint stiffness. 3 patients were suffering from Grade 4 loss of movements, 4 patients were suffering from Grade 2 loss of movements while 2 patients were suffering from Grade 1 loss of movements.

3.4. *Amsa marma viddha lakshana* (symptoms)

Out of 10 patients, Grade 3 *Amsa ruja* was found in 5 patients, Grade 2 *Amsa ruja* was found in 4 patients and Grade 1 *Amsa ruja* was found in 1 patient. Grade 3 *Cheshtopaghata* was found in 4 patients, Grade 2 *Cheshtopaghata* was found in 4 patients and Grade 1 *Cheshtopaghata* was found in 2 patients. Grade 3 *Kriyahani* was found in 4 patients, Grade 2 *Kriyahani* was found in 4 patients and Grade 2 *Kriyahani* was found in 1 patient. Grade 3 *Sparshasahatva* was found in 5 patients, Grade 2 *Sparshasahatva* was found in 4 patients and Grade 1 *Sparshasahatva* was found in 1 patient.

3.5. Scope, Limitations and Recommendations

Present study was conducted in less patients. Only symptoms of *Marmaghata* stated in Ayurveda classical texts and symptoms of Frozen shoulder mentioned in modern science were correlated. Anatomical changes were not observed. Large sample study and correlation with anatomical change viz. by cadaveric study or via X Ray or MRI will give more positive results.

4. CONCLUSION

Considering symptoms of *Bahustabdhata* (Frozen shoulder) and *Amsa marmaghata* it

was observed that symptoms of both are almost same. Hence based upon observations it concluded that, there is association between *Bahustabdhata* (Frozen shoulder) and *Amsa marmaghata*. *Vaikalyakaravta* of *Amsa marma* as per stated in Ayurveda classical texts was also found in the study. Since data was limited statistical analysis was not performed.

REFERENCES

1. Yadavaji Trikamaji Acharya Editor (Reprint ed.). Nibandhasangraha Sanskrit commentary of Dalhan on Sushruta Samhita of Sushruta, Sharira sthana: Chapter 6. Varanasi: Chaukhambha Surabharati Publication, 2008; p. 4.
2. Ibidem 1, Sharira sthana: Chapter 6. p. 288.
3. Ibidem 1, Sharira sthana: Chapter 6, p. 288.
4. Ibidem 1, Sharira sthana: Chapter 6. p. 290.
5. Bhisagacharya Harisastrim Paradakara Vaidya Editor (9th ed.). Sarvanga Sundara commentary of Arunadatta & Ayurveda Rasayana commentary of Hemadri on Astanga Hrdayam of Vagbhata. Varanasi: Chaukhambha Orientalia, 2005; p. 413.
6. Dias R, Cutts S, Massoud S. Frozen shoulder. *BMJ*. 2005 Dec 17;331(7530):1453-6. doi: 10.1136/bmj.331.7530.1453. PMID: 16356983; PMCID: PMC1315655.
7. Candela, V., Giannicola, G., Passaretti, D. et al. Adhesive capsulitis of the shoulder: pain intensity and distribution. *Musculoskelet Surg* 101, 153–158 (2017). <https://doi.org/10.1007/s12306-017-0488-6>
8. Vaidya Jadavji Trikamaji Acharya, Narayana Ram Acharya Editors (9th ed.). Nibandha sangraha commentary of Dalhana and Nyaya Chandrika Panjika commentary of Gayadasacharya on Sushruta Samhita of Sushruta. Varanasi: Chaukhambha Orientalia, 2007; p. 371.
9. Ibidem 1, Sharira sthana: Chapter 6, Verse 26. p. 278.
10. Ibidem 1, Sharira sthana: Chapter 6, Verse 13. p. 274.
11. Prof. K. R. Srikantha Murthy Editor (1st ed.). *Susruta Samhita of Sushruta (Vol 2)*, Sutrasthan: Chapter 25, Verse 37. Varanasi: Chaukhamba Orientalia, 2001; p. 580.
12. Inayat F, Ali N, Shahid H, et al. (August 06, 2017) Prevalence and Determinants of Frozen Shoulder in Patients with Diabetes: A Single Center Experience from Pakistan. *Cureus* 9(8): e1544. doi:10.7759/cureus.1544.

Cite this article as:

Kakade RB, Vikhe BC. Prushtha Marma and Amsa Marmaghata in Bhujastambha (Frozen Shoulder) – A Retrospective, Observational, Cross-Sectional, Review Based Study. *International Journal of Research in Ayurveda and Medical Sciences* 2020; 3 (4): 248-251.

Source of Support: Nil; Conflict of Interest: None declared.