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ANATOMICAL STUDY OF PRUSHTHAGATA MARMA W.S.R. TO AMSA MARMA

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Abstract:

Background: *Marmas*¹ are the most sensitive & vital areas in our body. which, if injured lead to pain, deformity & even death occurs immediately or sometimes later. Sushruta samhita gives detail description of *marmas*, mainly in the chapter-six of *Sharirsthana*, *Pratyeka Marma Nirdesh Sharir*. *Acharya Sushruta*, has mentioned one hundred & seven *marmas* in our body, which further divided into five classes depending upon their structure, such as *mamsa*, *sira*, *snayu*, *asthi* and *sandhi marma*. There are 27 *Snayu Marmas*. *Amsa*² *marma* is one among them. The shoulder joint is most mobile joint in the body The shoulder injuries like rotator cuff tear, Frozen shoulder, dislocation of shoulder etc are common now a days. For example, the group of muscles and tendons in the shoulder is known as the rotator³ or musculotendinous cuff. The trauma or injury to roatator cuff shows immobility of shoulder (Bahustabdhata). So we can say that trauma or injury to the region of *amsa marma* shows above said lakshana. **Materials & Methods:** This is the literary study & References and data about *Amsa marma* is collected from various *Ayurvedic* and modern texts. From *Brihatrayis* and *Laghutrayis* and other classical books **Results:** The study for *Amsa marma* is done with the help of both *Ayurvedic* and Modern texts. By this study, Predominantly the structures falling under the shoulder and scapular region are mostly affected due to trauma to *Amsa marma*. It is finally observed that the main structures found at this region are ligaments of Acromioclavicular & glenohumeral joint, Trapezius muscle, Rotator cuff & spine of scapula.

Keywords: *Amsa marma*, *stabdhabahuta*, *vaikalyakara*, *snayu* & ligaments

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INTRODUCTION:

The term *Amsa* denotes to a part or a portion of *Amsaphalaka* (Scapula). It is the synonymous of the shoulder also. *Amsa marma* is situated at the junction of shoulder & neck. *Amsa marma* is located on the midpoint of imaginary line drawn from tip of shoulder to root of spine of scapula. Depending upon the injury effect (*Parinama*), it is *vaikalyakara* type & According to structure (*Rachana*), it is *snayu marma*, *Amsa marma* consist of shoulder & scapular region. *Acharya sushruta* mentioned *pratanavati* type of *snayu* present in *shakha* (All extremities) & *sandhi* (joints). The shoulder joint (glenohumeral joint) is a ball and socket joint between the scapula and the humerus. It is the major joint which connecting the upper limb to the trunk. *Pratanavati's snayu* is close to structure of ligaments. Ligaments of *Amsa sandhi*, which bind the joints, bones together for maintaining the movements & stability. Any injury to this structure causes loss of movement of upper limb (*stabdhabahuta*⁵). Hence, from both the clinical and surgical perspective, the detail knowledge of trauma site, structures involving and identification of deformity is essential. So this paper is an attempt to find out the exact anatomical structures lies at the region of *Amsa marma*.

Aim:

Anatomical study of *prushthagata marma* w.s.r. to *Amsa marma*

Objectives:

1. To compile the literature about *Amsa Marma* from *Ayurvedic* and classical texts.
2. To critically analyze the anatomical structures at the region of *Amsa marma*.

Materials & Methodology:**Literary study-**

The References and data about *Amsa marma* is collected from various *Ayurvedic* and modern texts like *Brihatrayis* and *Laghutrayis* and other classical books.

Review of literature:**Classification of *Amsa marma*:**

- **According to *shadanga*:**
Prushthagata (Upper back) marma
Number-02
- Site:- Bahumurdhagreevamadhye
Amsapeethaskandha nibandhauvanso
naam || -Su.Sha.6/35
It is situated between *Bahushira* (Head of the shoulder) & *greeva* (neck), on the trapezius muscle. This connects the Shoulder & *Amsapeetha* together. Dalhanacharya commented *Amsapeetha* as *Bahushira* & *Acharya sushruta* described *Amsapeetha* as a *sandhi*.
- *Pariman* (Dimensions): half angula (finger unit).
- Type: According to *Rachana* (structure)-
Snayu marma
According to *Parinama* (Effect)-
Vaikalyakar marma Viddhalakshana (Effect of trauma):-
- Tatra *stabdhabahuta* || -Su.Sha.6/35
**According to *Acharya sushruta*-
*Stabdhabahuta*** (stiffness of the upper limb with loss of function);
**According to *Acharya vagbhata*-
*Bahukriyahara*** (Loss of function of upper limb).

***Skandha* (Shoulder)-**

Ashtangulau skandhau, Shadangulauvanso ||
- Ch.Vi.8/117

According to *Acharya Charak*- *Skandha*-
Acromioclavicular joint to midpoint of arm

(Deltoid region):-8 *Angula*(6inch). This region is responsible for lifting of heavy items.

Amsa:-Line joining from tip of shoulder to the root of spine of scapula-6 *Angula* (4.5inch).

BONES:

The shoulder is made up of three bones: the scapula, clavicle and humerus. To maintain stability, the bones of the shoulder are held in place by muscles, tendons and ligaments. The *Amsa marma* is connected to *Amsapeetha* (Acromioclavicular joint) & *skandha* (shoulder/Glenohumeral joint).

JOINTS:

The shoulder is made up of two separate joints, the Acromioclavicular joint and the Glenohumeral joint.

i) Acromioclavicular joint:

The **acromioclavicular joint** (tip of shoulder) is formed by an articulation between the lateral end of the clavicle and the acromion process of the scapula. It is a plane type of synovial joint & is composed of Acromioclavicular & Coracoclavicular ligaments,. These ligaments provide stability to joint. When one of these ligaments tears it can lead to shoulder separation or dislocation.

ii) Glenohumeral joint:

It is the major joint connecting upper limb to trunk. It is the most mobile & less stable joint in the body. In the Glenohumeral joint, the ligaments play a important role in stabilising the bony structures.

The group of muscles and tendons in the shoulder is known as the **rotator or musculotendinous cuff**. The rotator cuff made up of the tendons of four muscles, the supraspinatus, infraspinatus, teres minor and the subscapularis. The muscles & tendons of the rotator cuff keep the humerus tightly in the socket.

Table no.1 Ligaments that connect the shoulder blade to the Humerus

SNo.	Ligaments	Function
1.	Acromioclavicular ligament	It strengthens the joint capsule, superiorly.
2.	Superior, middle and inferior glenohumeral ligaments	These ligaments are the main source of stability for the shoulder. It help to hold the shoulder in place.
3.	Coracohumeral ligament	which strengthens the upper part of the capsule of the shoulder joint.
4.	Coracoacromial ligament (It is composed of the conoid and trapezoid parts)	It function is to protect the superior aspect of the joint.
5.	Coraco-clavicular Ligaments	Strengthens lateral end of clavicle

Trapezius Muscle.

The trapezius is wide, flat, triangular muscle, which covers most of the upper back & posterior of the neck. This muscle arises from Spines of cervical & thoracic vertebrae & It is attached distally onto the lateral 1/3 of clavicle, acromion & spine of scapula.

The trapezius muscle is innervated by the spinal root of accessory nerve. Injury to this nerve causes paralysis of trapezius muscle.

DISCUSSION:

Snayu⁶:-Based on many textual references. It is close to ligaments, tendon, Aponeurosis, fascia & somewhere it is consider as nerve. *Snayus* are rope or jute like structures. Their main function is binding & They bind together the *mamsa* (Tendons bind muscle to bone), *asthi* (Ligaments attach one bone to another) and *medas* (fat).

Vaikalyakara⁷ (causing deformity):

Vaikalyakara means which deforms or cripples. The nature of *vaikalyakara marma* is *saumya* i.e. having qualities of moon; The *soma guna* supports or nurtures the *prana*⁸ by its *Sthira* (stable) & *sheeta* (cold) attributes. Therefore, when injured, these *marma* produce deformity & dysfunction but rarely causes death.

Amsa marma is *vaikalyakara marma* & injury to this *marma* leads to *Bahustabdhata*. which can be correlated with the symptoms of frozen shoulder, trapezius palsy, rotator cuff injuries, shoulder dislocation etc.

Table no.2 Views of some authors on *amsa marma*:

S.No.	Authors	Anatomical structures involved
1.	Dr. B.G.Ghanekar ⁸	Coracohumeral ligament, Glenohumeral ligament, Trapezius muscle.
2.	Prof Dr. D.G.Thatte ⁹	Coracohumeral ligament, & Trapezius muscle
3.	Dr.Tarachand Sharma ¹⁰	Superior acromio-clavicular ligament, coracohumeral ligament & all the

		other ligaments of shoulder joint to be considered.
4.	Prof. J.N. Mishra ¹¹	Coracohumeral ligament, Glenohumeral ligament, Trapezius muscle, Spine of scapula.
5.	Dr.Ramraksha Pathak ¹²	Coraco clavicular ligaments, Conoid ligament, Trapezoid ligament, Superior acromio-clavicular ligament, Coraco-acromial ligament.

By the above discussion, Predominantly the structures falling under the *Amsa marma* (shoulder and scapular region) are mostly affected due to traumatic injury.

CONCLUSION:-

It can be concluded that, *Amsa Marma* is located in between the Head of upper limb and Neck. Structurally, it is *snayu marma* & the main structures found at this region are- Coracohumeral ligament, Glenohumeral ligament, Trapezius muscle. Acromio-clavicular ligament, Coraco clavicular ligaments, Conoid ligament, Trapezoid ligament, Coraco-acromial ligament, Musculotendinous cuff & spine of scapula.

REFERENCES:

- http://www.inrein.com/ijshr/IJSHR_Vol.4_Issue.2_April2019/IJSHR007.pdf
- https://wjpr.s3.ap-south-1.amazonaws.com/article_issue/1561792_356.pdf

3. <https://link.springer.com/article/10.1007/s12178-020-09675-3>
4. https://wjpr.s3.ap-south-1.amazonaws.com/article_issue/1614920172.pdf
5. https://www.ijrams.com/article_html.php?did=8680&issueno=0
6. https://wjpr.s3.ap-south-1.amazonaws.com/article_issue/1614920172.pdf
7. <https://www.theyogicjournal.com/pdf/2020/vol5issue1/PartB/5-1-42-366.pdf>
8. Dr.Bhaskar Govind Ghanekar, *Sushruta samhita sharirasthana*, meharchand lacchamandas publications, new delhi, reprint 2015, *sharirasthana, chapter V-pratyekmarmaniredesha sharir upakrama*, page no.196.
9. Prof.D.G.Thatte, *Sharir rachana vigyan, chowkhambha sanskrita series office*, Varanasi, Edition-third 2011, Page no.611.
10. Acharya Dr.Tarachanda Sharma, *Ayurvediya sharira rachana vigyana*, Natha pustak bhandar, rohatak.,Page no.408,409
11. Prof.J.N.Mishra, *Marma & its management*, Chaukhambha Orientalia, Varanasi, Reprint Edition: 2016, Page no.31,176
12. Dr.Ramraksha Pathak, *Marma vigyan*, Jaikrishnadas Haridas Gupta: Chaukhambha sanskrita series office, Varanasi, Edition-2006, Page no.82
13. Dr.Bhaskar Govind Ghanekar, *Sushruta samhita sharirasthana*, meharchand lacchamandas publications, new delhi, reprint 2015, *sharirasthana, chapter V-pratyekmarmaniredesha sharir upakrama, sloka 35*, page no.196.
14. Dr.Anant Ram Sharma, *Sushruta samhita Vol-II(Sharir-chikitsa-kalpasthan)*, Chaukhamba Subharti Prakashan, Varanasi, Edition-2015, chapter VI, *pratyekmarmaniredesha sharir, sloka 3*, page no.87.
15. Dr.Bramhanand Tripathi, *Charaka samhita Vol I* Chaukhamba surbharati prakashana, Varanasi; Edition: 2019, *Rogabhishakjitiya vimanadhyaya sloka no. 117*, page no. 768.

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