



Clinical Evaluation of Marma Therapy in Avabahuka W.S.R. to Frozen Shoulder

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Purpose

“Natural forces within us is the true healer of a disease”- Hippocrates

Ayurveda believes that Marmas are the Vital Points through which the Positive Prana (vital energy) flows. Marma Therapy is the art of treating very special vital points. Marma Therapy is a Simple Self-treatment having non invasive technique with elaborated Clinical Therapy.

Adhesive capsulitis (frozen shoulder) is one of the most common musculo-skeletal problems seen in orthopedics. Some have described it as a self-limiting disorder that resolves in 1–3 years. Other studies report ranges of between 20 and 50% of patients with Adhesive capsulitis suffer long-term ROM deficits that may last up to 10 years. In Ayurveda Avabahuka – Characteristics 1.soshana of amsa bandha 2. akunchana (constriction) of Sira 3.bahupraspandahara.

Method: The clinical study was carried out for 30 patients falling under the inclusion criteria from GAD, Jatri, Raigarh, CG and Gurukul Kangri Ayurveda college and Hospital, Haridwar. Marma therapy was done by giving adequate digital pressure twice a day on Kshipra, kurpara, Kakshadhara and Amsa marma. Each marma was stimulated for 20 times in one sitting in the rhythm of our respiration. The effects were noted on various parameters and symptoms of Avabahuk in four stages viz immediately after MT, one day after MT, one week after MT and 15 days after MT and follow up was done after one month.

Result: On statistical analysis highly significant changes were observed in (1). reduction in pain 2.increase in ROM vis a vis flexion, Abduction, External rotation, Internal rotation and 3. Reduction in joint stiffness. The patient reporting any untoward incident or complication was insignificant.

Conclusion: Marma therapy is a promising fast acting, cost effective, Rapid Action, Less time consuming, easy to use and non invasive alternative method for treatment of Avabahuk vis a vis Primary Adhesive capsulitis. Extensive further pharmacological research studies are the need of the hour.

Keywords: marma therapy, avabahuka, frozen shoulder, adhesive capsulitis.

Introduction

Imagine if any portion or part of our body becomes frozen/stiff and encountered with extreme pain then how would you feel...??? You will probably become irritable, impatient, short

tempered and finally depressed thus ruining one's self peace. Pain is an irksome experience, whether acute or chronic, it makes our life difficult. So one such condition is frozen shoulder that makes our lifestyle harsh. Our shoulder joint consists of three

bones namely humerus (upper arm bone), clavicle (collarbone) and scapula (shoulder blade) and important structures like rotator cuff, bursa, labrum and capsule. Normally capsule of shoulder joint is elastic and allows great range of motion but inflammation, fibrosis, scarring and contraction of the capsule may cause restriction of movement and this condition is baptized as frozen shoulder. Frozen shoulder is sometimes also known as adhesive capsulitis, or painful stiff shoulder.

The term Avabahuka was first coined by Acharya Sushruta where he has described Samprapti (Pathogenesis) and Rupa (Symptom) of Avabahuka. Both Ashtang Hridaya and Ashtang Samgraha have elaborated the full account of Avabahuka. It is mentioned as one among the eighty types of vata nanat maja vikaras by both Sharangadhara and Bhavamishra. Arunadutta and Dalhana, both have commented on samprapti, lakshana and treatment of Avabahuka in their works. In Madhava nidana two conditions of the disease has been mentioned – Amsa shosha and Avabahuka. Amsa shosha can be considered as the preliminary stage of the disease where loss or dryness of Sleshmaka kapha from amsa sandhi occurs. In the next stage i.e., Avabahuka, due to the loss of shleshmaka kapha symptoms like shoola during movement, restricted movement etc are manifested.

What is frozen shoulder (Adhesive capsulitis)

Frozen shoulder is composed of two words frozen + shoulder. Frozen rendered immobile and shoulder means the upper joint of a person's arms . So a constant pain, stiffness and progressive loss of shoulder motion is termed as frozen shoulder. It affects both active and passive movements of shoulder joint whether it is flexion, extension, abduction, adduction, external rotation, internal rotation.

So lets do some exercise to scrutinize are you a patient of frozen shoulder or not...???

- Abduction: “Move your arms away from midline of your body”.

- Adduction: “Swing your arms towards midline of your body”.
- Flexion: “Raise your arms anteriorly in front of your eyes and now above the head”.
- Extension: “Just opposite to flexion move your arms posteriorly”.
- External Rotation: ” Make a shape of letter “ L” by your arm and forearm and move it side wards”.
- Internal Rotation: “Please put your hands on the back of your spine”.

If you are unable to perform these movements then you conceivably might be a sufferer of frozen shoulder.

Causes of frozen shoulder

The specific cause of frozen shoulder is not yet detected. However this condition may be induced due to certain risk factors such as:

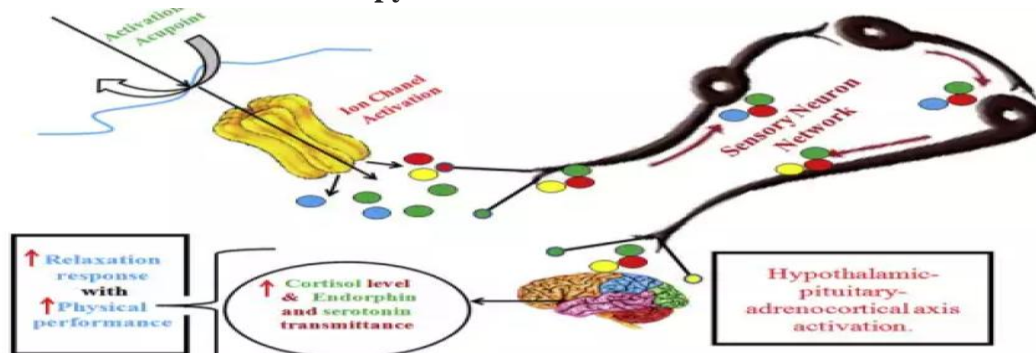
- **Diseases:** People suffering from stroke, diabetes mellitus, heart diseases, lung diseases, connective tissue diseases, shoulder conditions like calcific tendonitis, rotator cuff tear, thyroid problems may be overactive thyroid (hyperthyroidism) or an underactive thyroid (hypothyroidism), breast cancer, immobility, seizures, accidents, shoulder injury or surgery, rheumatoid arthritis, autoimmune diseases, cervical disc diseases of neck etc.
- **Aging influence:** The people belonging to 4th or 5th decade are more susceptible for this disease especially women as these people are more prone for fall, decrease in bones strength & density, loss of calcium & minerals, injuries and immunosenescence.
- **Immobilization:** Any previous injury or surgery, after surgery idleness or repose stage may cause inefficiency to move the shoulder joint which may also become a leading cause of frozen shoulder.
- **Trauma:** A mild trauma to the shoulder also act as a trigger for frozen shoulder

Symptoms:

Symptoms occur slowly, without any hurry i.e. leisurely and in three phases. These phases are named according to the symptoms that developed gradually. So these phases are pain or freezing stage, stiffness or frozen stage and lastly resolution or thawing stage.

- **1st stage:** Pain or freezing stage: It is the initial stage of adhesive capsulitis, in this pain is the cardinal factor which may get enhanced with any movement of limb or soma. It may get worse at night or in cold weather and may last for several weeks to months.
- **2nd stage:** Stiffness or frozen stage: It is the succeeding stage of shoulder contracture as the name suggests, in this range of motion of the shoulder joint is limited i.e. the shoulder gets stiffed or frozen. The most astonishing feature of this phase is that pain is self-resolving in nature while period of this stage may last up to 1 year.
- **3rd stage:** Resolution or thawing stage: It is the ultimate stage of the frozen shoulder which apprises that the range of glenohumeral joint begins to improve over time. This process will take time, sometime several years and may last up to 3 years.

Treatment- In modern sciences anti-inflammatory medicines, physical therapy, injections and manipulation under anesthesia (hydrodilatation) was performed. If these non-operative methods fail then surgery is executed.

Biochemical mechanism of marma therapy

If you have tried all these treatments and it hasn't resulted in a positive outcome then the best job is to move on to another therapy especially to Marma therapy/treatment which is also designated as "Mother of all healing therapies" because one sitting of marma therapy can really bring marked relief. Many people have tried this therapy and got relieved from painful & stiff shoulder in a very short span of time.

- What is Marma and Marma Therapy
- Ayurveda believes that Marmas are the Vital Points through which the Positive Prana (vital energy) flows.
- Marma Points are positions on the body where flesh, veins, arteries, tendons, bones and joints meet & are also junctions where Vata, Pitta and Kapha elements meet.
- Marma Therapy is the art of treating very special vital points
- Marma Therapy
- Simple Self-treatment
- Elaborate Clinical Therapy
- Low cost of treatment.
- Medicine-less treatment possible.
- Non invasive technique
- Can also be used in conjunction in other medical treatments – Allopathy, Ayurveda, Siddha, Unani, Homoeopathy, etc.
- Almost no adverse effects or side effects when done properly.
- Rapid Action, Less time consuming and easy to use

Objectives

- To Evaluate the Clinical Efficacy of Marma Therapy in Avbahuka
- To suggest further research areas related to the field

Materials and Methods-

Study Design: It is an open random Clinical study.

Selection of Patients

- The clinical study was carried out for 30 patients falling under the inclusion criteria from G.A.D. , Jatri, Raigarh, CG and Gurukul Kangri Ayurveda college and Hospital, Haridwar.
- Marma therapy was done by giving adequate digital pressure twice a day on Kshipra, kupara, Kakshadhara and Amsa marma.
- Each marma was stimulated for 20 times in one sitting in the rhythm of our respiration.
- Ayurvedic medicine yograj gugglu 2tab BD and dasmoorl kwath 30 ml OD was given to the patient with this therapy.
- The effects were noted on various parameters and symptoms of Avabahuk in four stages viz immediately after MT, one day after MT, one week after MT and 15 days after MT and follow up was done after one month.

Statistical Analysis

The Information gathered regarding demographic data is given in percentage. The scoring of criteria's of assessment was analyzed statistically in term of mean grade of B.T. (Before Treatment), A.T. (After Treatment) , paired "t" test was carried out at $P < 0.02$ and $P < 0.0001$
Highly significant - $P < 0.01$ and $P < 0.0001$
Significant - $P < 0.02$
Insignificant - $P > 0.02$

Inclusion Criteria

- Patients were randomly selected irrespective of Sex, Occupation, Caste etc

- Patients between the Age Group of 16-70 were included
- Clinically Diagnosed Patients of Primary Adhesive Capsulitis/ Avbahuka with confirmatory tests for shoulder pain were included

Exclusion Criteria

- Patients having history of trauma
- Pregnant/Lactating Women
- Systemic Diseases viz Cardiac patients, CRF etc

Assessment Criteria

Main complains/ symptoms were scoring in these pattern.

No Pain /movement	0
Mild	1
Moderate	2
Severe	3

Summary of Demographic Data

This study was carried out in proved cases of Avabahuka (Frozen shoulder).

Observations of the present study can be summarized as under

During the study, total thirty three patients were enrolled, who fulfilled the inclusion criteria. Out of these three patients did not appear for regular follow ups as advised and were dropped from the study. Remaining 30 patients completed the trial. Instructions regarding do's and don'ts were given to patients at the time when the patients were registered.

Demographic Data

Out of 30 patients taken for study, the maximum number of patients registered were in between 30-60 years of age group 19 (63.33%) followed by above 60 yrs age group 10 (33.3%) and below 30 yrs age group (3.33%).

Out of 30 patients taken for study, the maximum patients were female 17(56.6%) and male patients were 13 (43.3%).

Out of 30 patients taken for study, 16 (53.33%) of patients have pain since less than 6 months, 6(20%) of patients have pain since 6 months to 1 year, 5 (16.66 %) patients have pain since 1yr to

1.5 years and 3(10 %) patients have pain since more than 1.5 years.

Effect of Therapy on Clinical Features: On statistical analysis, it was observed that marma therapy proved effective in alleviating the symptoms of avabahuka (Frozen shoulder). The results are being summarized as under:

- The mean grade of Pain in rt. shoulder. before treatment was 1.866667, it lowered down to 0.066667, giving a relief of 96.4285 % with 't' value of 8.752018 (P <0.0001) which was statistically highly significant.
- The mean grade of Pain in Lt. shoulder before treatment was 1.066667, it lowered down to 0.066667, giving a relief of 96.4285 % with 't' value of 4.66369 (P <0.0001) which was statistically highly significant.
- The mean grade of painful mov.in rt. shoulder. before treatment was 1.866667, it lowered down to 0.133333, giving a relief of 94.64286 % with 't' value of 5.4772 (P <0.0001) which was statistically highly significant.
- The mean grade of painful mov.in Lt. shoulder before treatment was 1.1, it lowered down to 0.1, giving a relief of 90.909 % with 't' value of 5.4772 (P <0.0001) which was statistically highly significant.
- The mean grade of restricted mov.in rt. shoulder. before treatment was 1.8, it lowered down to 0.166667, giving a relief of 85.18519 % with 't' value of 5.4772 (P <0.0001) which was statistically highly significant.
- The mean grade of restricted mov.in Lt.sh. before treatment was 1, it lowered down to 0.033333, giving a relief of 96.66667 % with 't' value of 5.4772 (P <0.0001) which was statistically highly significant.
- The mean grade of stiffness in rt. Sh.. before treatment was 1.8, it lowered down to 0.166667, giving a relief of 85.18519 % with 't' value of 5.4772 (P <0.0001) which was statistically highly significant.
- The mean grade of stiffness in Lt.sh. before treatment was 1.066667, it lowered down to 0.066667, giving a relief of 93.75 % with 't' value of 5.4772 (P <0.0001) which was statistically highly significant.
- The mean grade of flexion in Rt shoulder. before treatment was 1.766667, it lowered down to 0.066667, giving a relief of 96.22642 % with 't' value of 5.4772 (P <0.0001) which was statistically highly significant
- The mean grade of flexion in Lt shoulder. before treatment was 1, it lowered down to 0.033333, giving a relief of 96.66667 % with 't' value of 5.4772 (P <0.0001) which was statistically highly significant
- The mean grade of Extension in Rt shoulder. before treatment was 1.7, it lowered down to 0.033333, giving a relief of 98.03922 % with 't' value of 5.4772 (P <0.0001) which was statistically highly significant
- The mean grade of Extension in Lt shoulder. before treatment was 0.966667, it lowered down to 0.033333, giving a relief of 96.55172 % with 't' value of 5.4772 (P <0.0001) which was statistically highly significant
- The mean grade of Adduction in Rt shoulder. before treatment was 1.766667, it lowered down to 0.066667, giving a relief of 96.22642 % with 't' value of 5.4772 (P <0.0001) which was statistically highly significant
- The mean grade of Adduction in Lt shoulder. before treatment was 0.866667, it lowered down to 0.033333, giving a relief of 96.15385 % with 't' value of 4.205107 (P <0.0001) which was statistically highly significant
- The mean grade of Abduction in Rt shoulder. before treatment was 1.766667, it lowered down to 0.066667, giving a relief

of 96.22642 % with 't' value of 5.477226 (P <0.0001) which was statistically highly significant

- The mean grade of Abduction in Lt shoulder. before treatment was 1, it lowered down to 0.033333 ,giving a relief of 96.22642 % with 't' value of 5.477226(P <0.0001) which was statistically highly significant
- The mean grade of Internal rotation in Rt Shoulder . . before treatment was 1.633333, it lowered down to 0.066667 ,giving a relief of 93.87755 % with 't' value of 5.477226(P <0.0001) which was statistically highly significant
- The mean grade of Internal rotation in Lt Shoulder. before treatment was 0.866667, It lowered down to 0.033333 ,giving a relief of 96.15385 % with 't' value of 5.477226(P <0.0001) which was statistically highly significant
- The mean grade External Rotation in Rt Shoulder. before treatment was 1.766667, It lowered down to 0.133333, giving a relief of 94.33962 % with 't' value of 5.477226(P <0.0001) which was statistically highly significant
- The mean grade External Rotation in Lt Shoulder. before treatment was

1.033333, It lowered down to 0.066667, giving a relief of 93.54839 % with 't' value of 5.477226(P <0.0001) which was statistically highly significant

- The mean grade Stambh in Lt Shoulder . before treatment was 1.066667, It lowered down to 0.033333, giving a relief of 96.875 % with 't' value of 4.761949(P <0.0001) which was statistically highly significant
- The mean grade Stambh in Rt Shoulder . before treatment was 1.7, It lowered down to 0.033333, giving a relief of 96.875 % with 't' value of 8.601139 (P <0.0001) which was statistically highly significant
- The mean grade Overall Pain. before treatment was 2.466667, It lowered down to 0.166667, giving a relief of 93.24324 % with 't' value of 5.477226(P <0.0001) which was statistically highly significant

Complications

- Out of the total 30 patients one patient complained of swelling and tenderness at the site of Kurpara Marma for 2 days
- Two patients felt mild nausea after the 1st sitting of therapy which subsided after 1 hour



Precautions of Marma Therapy

- Adequate pressure
- Avoid During Pregnancy
- Extra care is needed in treating Marmas of Head and Neck
- Position of the Patient

- Keep a watch on the Vitals-BP, Pulse, R.R
- Precautions of Marma Therapy
- Should be done under Expert eyes initially

Result

- Marma therapy in Avbahuka was found to be highly effective in most of the parameters of assessment. On statistical analysis highly significant changes were observed in 1. reduction in pain 2. increase in ROM vis a vis flexion, Abduction, External rotation, Internal rotation and 3. Reduction in joint stiffness.
- Complications and side effects were insignificant. The patient reporting any untoward incident or complication was insignificant.
- Further longer duration study needs to be carried out along with extensive reverse pharmacological studies.

Conclusion

- Marma therapy is a promising fast acting, cost effective, Rapid Action, Less time consuming, easy to use and non invasive alternative method for treatment of Avabahuk vis a vis Primary Adhesive capsulitis.
- Extensive further pharmacological research studies are the need of the hour.

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