



## **A Single Case Study on Avabahuka (Frozen Shoulder) and its Management by Cupping Therapy**

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### **ABSTRACT**

*Frozen shoulder is a clinical syndrome of pain and severely decreased joint motion caused by thickening and contraction of the joint capsule. The prevalence is highest among people in their forties and fifties. In ayurveda, the symptoms, etiopathogenesis resembles with Avabahuka. Avabahuka is one of Acharya Sushruta's eighty sorts of Vata Vyadhis, which are mostly caused by vitiated Vata Dosha. It is an Amsa Sandhi (shoulder joint) condition that impairs the normal functioning of the upper limbs, thereby hindering the normal routine work of an individual. The classical symptom mentioned in Ayurvedic texts regarding Avabahuka is Bahuspadithara which means loss of movement of the arms. In this case study a 43 years old female patient came with the complaints of severe pain, stiffness and restriction in movement of right shoulder joint. Patient was diagnosed as frozen shoulder and treated with the cupping therapy. After five session of cupping therapy patient got significant relief in pain, stiffness and improvement in shoulder joint movement.*

**KEY WORDS:** Avabahuka, Frozen shoulder, Cupping therapy

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### **INTRODUCTION**

Vata Dosha is considered as a chief factor without which no disease can take place. Avabahuka is one of the Vata Vyadhis that hinders the upper limb's normal functioning. As a result, it has a significant effect on the working population, reducing their productivity and physical function. Avabahuka is a disease that usually affects the shoulder joint (Amsa Sandhi) and is produced by the Vata Dosha. Despite the fact that this condition is not listed in the Vata Nantamaja Vyadhis, Acharya Sushruta and others have considered it as a Vata Vaydhi. In Sushruta Samhita it is described as "Ansadeshasthito Vayu Shoshayitvama Ansabandhanam, Shiraschankunchaya Tatrastho Janyatavabahukam" which means the disease in which the enraged local Vayu dries up the normal Kapha lying about the shoulder joints is called Ansha Shosha and the form in which the aggravated local Vayu contract the nerves of the arms is called Avabahuka.[1] The Ansa Shosha which can be considered as the preliminary stage, is due to the single action of the enraged Vayu, while the next stage Avabahuka is due to the concerted action of the deranged Vayu and Kapha. Acharya Charaka, in Sutra Sthana of Charak Samhita mentioned Bahushosha[2] under Vata Nanatmaja Vyadhis and in Chikitsa Sthana mentioned it as Bahuvata.[3] In Ashtanga Hridaya and Ashtanga Sangraha it is described as "Ansamulasthito Vayu Sira Sankochaya Tatranga, Bahupraspanditharam Janyatyapabahukam" which means the condition in which the vata gets located at the root of the shoulder, by constricting the siras (veins) therein, produces Avabahuka, characterized by the loss of the movements of the arms.[4] In Madhava Nidana, Amsa Shosha (Vataj) and Avabahuka (Vata Kaphaj) two separate diseases are mentioned.[5]

The cause of is not separately enlisted; it may be Bahya hetu- causing injury to the vital parts of the shoulder joint and abhyantara hetu- indulging in the etiological factors that aggravate vata leading to the vitiation of vata, which in turn leads to pain and loss of movements of the arm. Kapha plays a vital role in case of margavarodha Avabahuka. The pathogenesis leads to the development of kaphavruta vatajanya Avabahuka. Impairment of bahupraspanda is one of the cardinal features in Avabahuka and this affects activities of the shoulder joint.

In Ayurvedic classics, the common line of treatment for Vata Vyadhi includes Snehana, Swedana, Virechana, Basti, Nasya, Dhoompana, Avrana Chikitsa and Shaman Chikitsa. Acharya Sushruta advised

Vatayvadhi Chikitsa except Siravyadha.[6] In Ashtanga Hridaya, Nasya and Uttarbhaktika Snehapana (Snehapana before meal) is mentioned for Avabahuka.[7] In Ashtanga Sangaraha, for Avabahuka, Navana Nasya (nasal medication) after meals should be adopted and if it is not associated with (symptoms of) Ama, Snehapana (drinking of medicated oil) should be followed.[8] In Chakradatta, Dashmooladi Kwatha and Baladi Kwatha are mentioned for Avabahuka.[9]

Frozen shoulder also known as adhesive capsulitis, is a condition characterized by stiffness and pain at shoulder joint. It is typically developing slowly, and in three stages, i.e Freezing stage, frozen stage and Thawing stage. Each stage can last a number of months. Treatment for frozen shoulder involves stretching and sometimes injecting corticosteroids and numbing medications into the joint capsule. In some cases, surgery is used to loosen the joint capsule.

Raktamokshana is accepted as half of the therapeutic measure in Shalyatantra like Basti in Kayachikitsa[10]. Raktamokshana is classified mainly as Shastra Visravana and Anushastra Visravaan. Pracchan and Siravedha comes under Shastra Visravana whereas Shringa, Jalauka, Alabu, Ghati, Vigharshan are included in Anushastra[11]. Out of these methods, Cupping therapy can be correlated with Shringa. The suction through specific cupped instrument was used since prehistoric time for the treatment of disease. Cupping therapy is an ancient method that has been used in the treatment of broad range of conditions [12]. There are many types of cupping therapy; however, Dry and Wet cupping are the two.

while in wet cupping the skin is lacerated so that blood is drawn into the cups[13]. There are three main possible hypothesis and theories might explain mechanism of pain reduction-

- 1) Pain Gate Theory
- 2) Reflex Zone Theory
- 3) Diffuse Noxious Inhibitory Controls.

#### **CASE REPORT-**

A 43-year-old female patient came in OPD of shalya tantra at Government Akhandanand Ayurveda Hospital with complaints of severe pain, stiffness and restriction in movement of right shoulder joint since 1 year. The patient had consulted Allopathic physician but could not get complete relief, therefore the patient approached for Ayurvedic treatment. She neither had history of DM, HTN, Asthma, trauma, any other illness nor any surgical history. This female patient worked as tailor for 6 years.

The patient was treated with Raktamokshana by Cupping therapy. 5 sessions of wet cupping therapy was done at the interval of 7 days.

Procedure of Wet Cupping-

#### **A) Poorvakarma-**

- 1) Written informed consent of the patient was taken having information regarding the procedure to the patient and relatives.
- 2) Required materials: Cupping set, betadine, disposable surgical blade no. 11, spirit swab, kidney tray, guaze piece.
- 3) Vitals, RBS, BT, CT, was noted prior to procedure.



Figure 1: CUPPING SET

#### **B) Pradhan Karma-**

- 1) Prone position given to patient. Then painting was done with betadine solution at the affected area of shoulder joint. Four medium size cups were selected for affected area.

- 2) By the cupping gun first cups were applied to the sites and air was sucked inside the cups. These cups were applied to the skin and left for the period of 3-5 minutes till the skin colour became dark pinkish purple and then removed.
- 3) The affected area (dark pinkish purple coloured skin) was cleaned with spirit swab then with the help of surgical blade no.11. superficial incisions (Scratches) were taken.
- 4) The cups were placed back on the skin and vacuumed created and observation was done for proper oozing of blood in the cups. Blood collection in cups was started spontaneously. Then after 3-5 minutes it started to form clots.
- 5) Cups were removed and impure blood collected in cups was wiped off in kidney tray with sterile guaze piece.



Figure 2: Cupping Therapy



Figure 3: Cupping Therapy

**C) Pashchat Karma-**

- 1) The site was cleaned and disinfected with the help of betadine, and turmeric powder was sprinkled over it.
- 2) Dressing was not done at this place.
- 3) Patient was advised to avoid water contact to this area for 24 hrs.



Figure 4: TURMERIC POWDER SPRINKLED OVER IT

**Assessment Criteria-**

**A) Subjective Assessment-**

- 1) Pain measured by VAS scale-Before and after treatment.

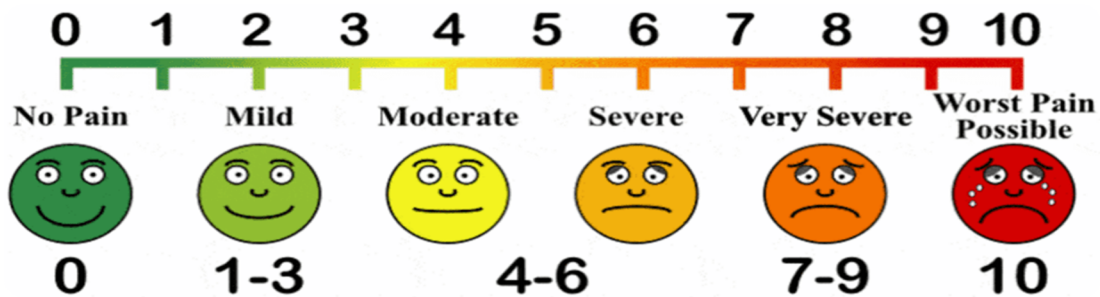


Figure 5: Pain Scale

Table 1 : Stiffness &amp; its Grades-

Stiffness	Grade
No stiffness or stiffness lasting for 5min	0
Stiffness for 5min to 2 hrs	1
Stiffness for 2 hrs to 8 hrs	2
Stiffness for more than 8 hrs	3

Table 2 : Assessment Score-

NO.	Criteria	Before Treatment	After Treatment (After 5 sessions of cupping)
1	Pain intensity (VAS Scale)	6	1
2	Stiffness	2	0

**DISCUSSION:**

After second sitting patient found 50 percent relief in symptoms and after fourth sitting more than 80 percent relief was experienced by the patient. Raktamokshan is considered as half of the therapeutic measures in shalyatantra.[14] Raktamokshana means the procedure of blood letting for the therapeutic purpose for removing morbid Doshas with blood. Acharya Sushruta declared Rakta as a 4th Dosha and its importance in our body. Also, Acharya Charaka and Acharya Vagbhata stated that diseases, which are not relieved by Sheeta, Ushna, Snigdha, Rooksha, etc., Upakrama can be considered as there is an involvement of Rakta and these diseases can be treated with Raktamokshana[15]. Raktamokshana by Shringa Avcharana is indicated in Vaat Dushti Rakta Vyadhis in Sushrut Samhita. Ushna, Madhura and Snigdha Gunas of Shringa antagonizes the Sheeta, Katu and Ruksha Gunas of Vata Dosha and relieves pain[16]. Hence, Shringa Avcharana was beneficial in this case. Cupping therapy can be equated with the Shringa. Thus, Raktamokshan is used in this condition. In the cupped region, blood vessels are dilated by the action of certain vasodilators such as adenosine, noradrenaline and histamine. Thus, there is an increase in the circulation to ill area. This allows immediate elimination of trapped toxins in the tissues. Loss of blood along with vasodilation tends to increase the parasympathetic activity and relax body muscles. As well as the samyaka lakshana of raktamokshan described in samhita like laghavam, vedanashanti and decrease in diseased condition [17] were experienced by the patient.

**CONCLUSION**

Raktamokshan (Blood letting) a popular para surgical procedure in Ayurvedic system of medicine. In this study 5 sittings of cupping at the interval of 7 days played a significant role in the management of avabahuka. Further studies are needed in more patients for its scientific validation.

**REFERENCES**

1. Sushruta., Sushruta Samhita (Ayurveda tatva Sandipika Hindi Vyakhya), Vol. 1., Kaviraj Ambikadutta Shastri, editor. Varanasi: Chowkhamba Sanskrit Sansthana; Edition reprint, 2014. Nidana Sthana, 1/82.p.304.
2. Caraka. Caraka Samhita (Vidyotini hindi commentary). Rajeshwardatta Shashtri, Kashinath Shastri, Gorakh Nath Chaturvedi, editors. Varanasi: Chaukhamba Bharti Academy; 2013. Sutra Sthana, 20/11.p.399.
3. Caraka. Caraka Samhita (Vidyotini hindi commentary). Rajeshwardatta Shashtri, Kashinath Shastri, Gorakh Nath Chaturvedi, editors. Varanasi: Chaukhamba Bharti Academy; 2013. Chikitsa Sthana, 28/98.p.794.
4. Vagbhata. Astanga Samgraha (English Translation) Vol. II. Translated by K.R. Srikantha Murthy, Varanasi: Chaukhamba Orientalia, 3rd Edition, 2003. Nidana Sthana 15/45, Pg.no 247.
5. Madhavkar. Madhav Nidana (Madhukosha Sanskrit commentary). Vijayarakshita and Srikantha Datta; edited with Vimala- Madhurdhara Hindi Commentary and Notes by Brahm anand Tripathi; Vol.1. Varanasi: Chaukhamba Surbharati Prakashan; 2014; 22/64.p. 5 45.
6. Sushruta. Sushruta Samhita (Ayurveda tatva Sandipika Hindi Vyakhya), Vol. 1. Kaviraj Ambikadutta Shastri, editor. Varanasi: Chowkhamba Sanskrit Sansthana; Edition reprint, 2014. Chikitsa Sthana, 5/23.p.43.
7. Vagbhata. Ashtanga Hrudaya, Sarvangasundara of Arunadatta and Ayurvedrasayana of Hemadri, editors. Varnasi: Chaukhamba Subharti Prakashan, 2014; Chikitsa Sthana, 21/44.p.725.
8. Vagbhata. Astanga Samgraha (English Translation) Vol. II. Translated by K.R. Srikantha Murthy, Varanasi: Chaukhamba Orientalia, 3rd Edition, 2003. Chikitsa Sthana 23/30, Pg.no 529.

9. Chakrapani: Chakradutta, edited by Indradev Tripathi. Varanasi India: Chaukhumbha Sanskrit Sansthan; Vatavyadhi Chikitsa, 22/24-26.p.194.
10. Vaidya Yadavji Trikamji, Sushrut Samhita commentary Nibandhasangraha by Acharya Dalhana,1931, Chaukhamba Prakashana, Shareersthana 8/23; p327.
11. Vaidya Yadavji Trikamji, Sushrut Samhita commentary Nibandhasangraha by Acharya Dalhana,1931, Chaukhamba Prakashana, Sutrasthan 14/25; p.62.
12. Ullah K, Younis A, Wali M. (2006). An investigation into the effect of cupping therapy as a treatment for anterior knee pain and its potential role in health promotion, Internet J Alternative Med.; 4:1.
13. Kim Jong- In, Lee Myeong Soo, Lee Dong-Hyo, Boddy Kate, Ernst Edzard. (2011). Cupping for treating pain: a systematic review. In: Evidence-based Complementary and Alternative Medicine.,467014.
14. Vaidya Yadavji Trikamji, Sushrut Samhita commentary Nibandhasangraha by Acharya Dalhana,1931, Chaukhamba Prakashana, Sutrasthan 13/4; p.54.
15. Vaidya Harishchandrasinha Kushvaha, Charaka Samhita commentary Ayurveda Deepika by Chakrapanidatta, 2011, Chaukhamba Prakashana, Sutrasthan 24/17; p.333.
16. Vaidya Yadavji Trikamji, Sushrut Samhita commentary Nibandhasangraha by Acharya Dalhana,1931, Chaukhamba Prakashana, Sutrasthan 13/5; p.54
17. Vaidya Yadavji Trikamji, Sushrut Samhita commentary Nibandhasangraha by Acharya Dalhana,1931, Chaukhamba Prakashana, Sutrasthan 14/32

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