



ISSN 2456-3110

Vol 4 · Issue 6

Nov-Dec 2019

Journal of
**Ayurveda and Integrated
Medical Sciences**

www.jaims.in

JAIMS

An International Journal for Researches in Ayurveda and Allied Sciences



Charaka
Publications

Indexed

An observational study to evaluate the efficacy of Rookasha Poorvaka Virechana Karma followed by Nasya Karma in the management of frozen shoulder (Avabahuka) in Madhamedha w.s.r. to DM Type-2

Deepanjali T¹, Kiran M Goud², Dr. Shreyas D.M.³

¹Post Graduate Scholar, ²Professor, ³Assistant Professor, Department of PG studies in Panchakarma, Sri Kalabyraveshwara Swamy Ayurvedic Medical College, Hospital & Research Centre, Bangalore, INDIA.

ABSTRACT

The prevalence of diabetes and its complication is increasing all over the world particularly in developing countries. The latest estimates shows a global prevalence of 382 million people with diabetes in 2013, expected to rise 592 million by 2035. Diabetes mellitus is a multi system involving disease whose effects are seen by means of severe complication, commonest is musculoskeletal disorder. Diabetes is known to affect the shoulder in many ways commonest among them is Avabahuka (frozen shoulder). Avabahuka is a disease of *amsa sandhi* with the clinical presentation such as *Stambha*, *Shula*, *Shosha* which can be correlated with the symptom of frozen shoulder, with no radiographic change only characterized by pain and restricted movement of shoulder joint. *Prameha* is a *babhudoshaja vyadi* mainly the *meda* and *kapha* are involved at the first it is necessary to bring *rookshana* effect before *Shodhana* that is *Virechana karma* to remove the *kapha* from *kostha*. *Nasya* is a main *Chikitsa sutra* mentioned in *Avabahuka*. Hence in the present study *Rookshanapoorva Shodhana* in the form of *Udwartana* followed by *Virechana karma* as *kostha shodhana artha* followed by *Nasya karma* has been adopted. Statistical analysis showed highly significant results p value (<0.0001) in almost all subjective & objective parameters of *Avabahuka*.

Key words: Avabahuka, Frozen shoulder, Udwartana, Virechana karma, Nasya.

INTRODUCTION

As the *Madhumeha* advances, excessive loss of *kledamsha* from the body in the form of *bahumutrata* leads to *ksheena kapha* and *pitta*,^[1] at that stage *Vata Dosh* is aggravated due to *dhatu kshaya* and

indulging in *Vata kara nidana* will lead to *Vata vyadhis*. *Avabahuka* is one among *Vataja Nanatmaja Vyadhi*. In *Madhava nidana*, due to loss or dryness of *Sleshmaka kapha* at *amsa sandhi*, symptoms like *shoola* during movement, restricted movement etc. are manifested at *amsapradesha*.^[2] Hence *Avabahuka* in modern sciences can be correlated to frozen shoulder. Long term complication of diabetes may include changes in connective tissue that occur as a result of high glucose levels. Adhesive capsulitis, often referred to as frozen shoulder refers to pathological condition of the shoulder joint in which affliction of the glenohumeral joint without radiographic changes, characterized by pain and restriction of all the movement of shoulder joint. It is often said that the pain is often severe enough to disturb the sleep.^[3] There are many ways that diabetes can affect the muscles and joints. Collagen is a protein that involved

Address for correspondence:

Dr. Deepanjali T.

Post Graduate Scholar, Dept. of PG Studies in Panchakarma, Sri Kalabyraveshwara Swamy Ayurvedic Medical College, Hospital & Research Centre, Bangalore, INDIA.

E-mail: tdeepanjali9@gmail.com

Submission Date: 08/11/2019 Accepted Date: 23/12/2019

Access this article online

Quick Response Code



Website: www.jaims.in

DOI: 10.21760/jaims.4.6.11

in making ligament and joint capsules. Sugar sticks to the collagen in cell and affects its ability to function.^[4] Diabetes can damage blood vessels and a poor blood supply results in scarring and damage in the body's elastic tissues. Calcium spots in the tendons and muscle around the shoulder are also seen more, this can be related that high blood sugars can impair blood flow through small vessels. The calcium deposits can sometime be painless but often cause severe discomfort or limited movements. This paper throws an insight to the understanding and management of frozen shoulder under the heading of *Avabahuka*.

AIMS AND OBJECTIVES

To evaluate the efficacy of *Rookasahan poorvaka virechana karma* followed by *Nasya karma* in the management of *Avabahuka* (frozen shoulder) in *Madhumecha* w.s.r. to type - 2 DM.

MATERIALS AND METHODS

Source

Patients who were fulfilling the inclusion criteria and diagnostic criteria of *Madhumecha* with *Avabahuka* (Frozen shoulder) were selected from the OPD and IPD of SKAMCH & RC, irrespective of sex, religion and socio economic status.

Materials used

Procedures	Drug used
<i>Sarvanga Udwarthana</i>	<i>Aragvadhadi Choorna</i>
<i>Bashpa Sweda</i>	<i>Ushna Jala</i>
<i>Arohana Krama Snehapana</i>	<i>Moorchita Tila Taila</i>
<i>Virechana Karma</i>	<i>Trivrut Avalehya</i>
<i>Nasya Karma</i>	<i>Kshreebala Taila & Bindu Pramana</i>

Assessment of the study will be done before treatment and on the last day of *Nasya karma* with the follow up for 15 days.

Diagnostic Criteria

- Patients presenting with the *lakshanas* of *Madhumecha*.
- Patients presenting with the clinical symptom of *Avabahuka* and frozen shoulder like Shola,

Restricted movement of shoulder joint , Difficulty in lifting / stretching / extending the arm.

- Patients presenting the signs and symptoms of Type 2 Diabetes mellitus.

Inclusion Criteria

- Patients of either sex in between the age group to 40-60 years.
- Patients presenting with the *lakshanas* of *Sthula Madhumecha*.
- Patients presenting the signs and symptoms of Type 2 Diabetes mellitus.
- Patients fit for *Rookshana Karma*.
- Patients fit for *Virechana Karma*.
- Patients fit for *Nasya Karma*.

Exclusion Criteria

- Patients with Juvenile Diabetes, Gestational Diabetes, Type 1 Diabetes mellitus
- Patients with rheumatoid arthritis
- Patients with fracture of the shoulder
- Patients with any infective condition or systemic disorders.

Study Design

A observational study with pre-test and post- test design was conducted on 10 patients with *lakshanas* of *Avabahuka*, Frozen shoulder with the *lakshanas* of *Sthula Madhumecha* w.s.r. to Type 2 Diabetes mellitus was been randomly assigned.

The data obtained was be recorded, tabulated and statistically analysed using suitable Statistical methods.

Intervention

10 patients who fulfil the inclusion criteria were selected and posted.

Sarvanga Udvartana

Sarvanga Udvartana was been done with *Aragvadhadi Gana Choorna* for 7 days for a duration of 35 minutes followed by *Bashpa Sweda*.

Virechana karma

Snehapana

Arohana Krama Snehapana with Moorchita tila taila was been given for 3 to 7 days based on Koshta and Agni of patient till Samyak Snigdha lakshanas appears.

Sarvanga Abhayanga

During 3 days of Vishrama kala, Sarvanga Abhyanga with Moorchita tila taila for duration of 35 minutes followed by Bashpa Sweda was been done along with Kapha Avruddhikara and Laghu Ahara.

Virechana Karma

The next day, Virechana was been performed with Trivrut Avalehya after Sarvanga Abhyanga and Baspha Sweda. Based on the kostha and agni dose was been fixedBased on Shuddhi lakshana, Samsarjana Krama was be advised.

Nasya Karma

After Parihara kala for Virechana karma, Nasya was been adopted with Ksheera bala taila 8 Bindu pramana after Sthinka Abhyanga with Moorchita tila taila for duration of 15 minutes and Pata sweda for 5 minutes for 7 consecutive days.

Assessment of the study will be done before treatment and after Nasya karma with the follow up for 15 days.

Assessment of Prameters

The following subjective and objective parameters were assessed using different grading before treatment and during the course of treatment.

Flexion

Up to 180 ⁰	0
Up to 135 ⁰	1
Up to 90 ⁰	2
Up to 45 ⁰	3
Cannot flex	4

Extension

Up to 60 ⁰	0
Up to 40 ⁰	1
Up to 20 ⁰	2
Cannot extend	3

Internal Rotation

Up to 60 ⁰	0
Up to 30 ⁰	1
Cannot rotate	2

External Rotation

Up to 90 ⁰	0
Up to 60 ⁰	1
Up to 30 ⁰	2
Cannot rotate	3

Abduction

Up to 180 ⁰	0
Up to 135 ⁰	1
Up to 90 ⁰	2
Up to 45 ⁰	3
Cannot abduct	4

Pain

No Pain (VAS)	0
Mild Pain (1-3 VAS)	1
Moderate Pain (4-7 VAS)	2
Severe Pain (8-10 VAS)	3

Tenderness

Patient doesn't allow to touch the part	4
Allows touch/ press , but then withdrawing the part	3
On pressing pain appears on the face of patients	2
On pressing patient tells, he is feeling pain but no sign in face	1

Abduction

Upto 180 ⁰	0
Upto 135 ⁰	1
Upto 90 ⁰	2
Upto 45 ⁰	3
Cannot Abduction	4

Adduction

Upto 130 ⁰	0
Upto 100 ⁰	1
Upto 70 ⁰	2
Upto 40 ⁰	3
Cannot Adduction	4

OBSERVATIONS AND RESULTS

Table 1: Showing effect of treatment on Flexion

Flexion	Mean		M.D	Paired t test				
	BT	AT		SD	SE	T	P	Re
BT-AT	2.9	1.6	1.3	0.7	0.22	5.9	<0.001	H.S

Table 2: Showing effect of treatment on Extension

Extension	Mean		M.D	Paired t test				
	BT	AT		SD	SE	T	P	Re
BT-AT	1.9	0.9	0.9	1	0.316	3.16	<0.001	H.S

Table 3: Showing effect of treatment on Internal Rotation.

Internal Rotation	Mean		M.D	Paired t test				
	BT	AT		SD	SE	T	P	Re
BT-AT	1.2	0.4	0.8	0.44	0.14	5.9	<0.001	H.S

Table 4: Showing effect of treatment on External Rotation

External Rotation	Mean		M.D	Paired t test				
	BT	AT		SD	SE	T	P	Re
BT-AT	1.5	0.6	1	0.66	0.20	5	<0.001	H.S

Table 5: Showing effect of treatment on Pain

Pain	Mean		M.D	Paired t test				
	BT	AT		SD	SE	T	P	Re
BT-AT	2.1	1.1	0.8	0.416	0.13	6.15	<0.001	H.S

Table 6: Showing effect of treatment on Tenderns

Tenderns	Mean		M.D	Paired t test				
	BT	AT		SD	SE	T	P	Re
BT-AT	2.1	0.9	1.2	0.7	0.22	5.45	<0.001	H.S

DISCUSSION

As Madhumeha is an Kleda Pradana, Marmastha Vyadhi and which involves Mahadosha it essential to control abadda meda, bahu darava kapha before Snehapana, Hence Rookshana^[5] with Aragwadadi gana choorna for Udvartana^[6] was adopted for 7 days, Aragwadadi gana choorna contains Tikta, Kashaya rasa , Rookasha and Tikshana guna these gets absorbed through Romakupa and increases agni at the level of twak that in turn increases the Brajaka pitta by which the Virya of Aoushadi get absorbed by this Rooksha guna increases all over the body mean while it decrease kledatha in the Sharira which is one among the Dooshyas of Madhumedha.^[7] And hence Medasaha Shoshana, Vatahara, Gouravahara and Sthirikarnam Anganam is achieved.^[8] Snehapana with Moorchita Tila Taila was adopted for minimum of 3 day and maximum for 5 days by considering the indications of Taila for Snehapanartha such as Pravruddha Sleshma, Medas, Chalasthulagalaudara, Drudatha and Sthiragaatra thus Taila was selected.^[9] Taila does the Uthkleshana of the Doshas in the Kostha. Sarvanga Abhanga followed by Bashpa Sweda was done for three days. Virechana karma has done with Trivrut Avalehya, because of its Tikta, Katu Rasa, Ushna, Teekshana, Sukshma, Vyavayi and Vikasi guna it reaches upto Hridaya by it Virya then circulates through vessels, Agneya guna causes Vishyandana and by tikshna guna causes disintegration of dosha, as Virechana dravya are predominate of prithvi and jala mahabutha cause the

downward movement & help in expelling the *dosha* through *guda marga*.^[10] Hence for the purpose of *kosta*^[11] *Shodhanaartha* and *Kaphahara virechana* was adopted as *kapha* is *armbaka dosha* in *Madhamedha* thereby it was necessary for adopting *Virechana* as *Poorva karma* to *Nasya karma*.^[12] *Samarjana karma* was advised based on *Shuddhi*. Once the *Kosta shodhana* was done, *Nasya* with *kshreea bala taila* was adopted in the form of *Sehana Nasya* which has been indicated in *Avabahuka*.^[13] In *Avabahuka* due to *Vata*, *dhatukshaya* occur and it further provoke *Vata* and by producing *sira snaya sankocha* and *shleshma Kashaya* in *amsapradesha*.^[14] This obliterates the internal stability of the joint and results in restricted movement of joint & pain. *Sneha Nasya* provides nourishment to the *Shiras*, *Sira* and *Snayu* in the *Amsapradesha* there by alleviates the *Vata* by *Madhura rasa*, *sheeta virya snigdha guna* and *tridosahara* properties & it does *Brumhana* of *dhatu*.

CONCLUSION

The present study revealed that *Madhumeha* on long term leads to *dhatu kshaya* and *shosha* in *amsapradesha* will manifest the *Avabahuka*. The present study shown highly significant results which indicates that improvement in degree of shoulder joint movement which is achieved to great extend by *Rookshana Poorvaka Virechana Karma* followed by *Nasya karma*.

REFERENCES

1. Sushruta, Sushruta Samhita with the Nibandha sangraha commentary of Sri Dalhanacharya and Nyayachandrika paanjika of Sri Gayadasacharya on Nidana Sthana edited by Vaidya Jadavji Trikamji acharya & Narayan Ram Acharya 'Kavyatirtha'; Chaukhambha Orientalia, Varanasi, Reprint: 2015, Nidana sthana, 6 Chapter, Verse 6 Page no : 290
2. Sri Madhavakara, Madhava nidanam, madhukosha commentary, sri vijayarakshita and srikantadatta, chaukhambha prakashan, reprint 2014; volume 1, chapter 22, Verse 64, page no.490.
3. www. Diabetesnet .com
4. Harrison's Principles of Internet Medicine, Edited by Longo, Fauci, Kasper, Hauser, Jameson, Joseph Loscalzo, Mc Graw-Hill Medical Publishing Division, 2015, 19th edition, Volume 1, Pg-122, Pp-465.
5. Vagbhata, Astanga Hrudaya with the commentaries of Sarvangasundara of Arunadatta and Ayurveda rasayana of Hemadri, edited by Pt. Bhisagacharya Harishastri Paradkar Vaidya, Chaukhambha Orientalia; Varanasi, Reprint: 2014, Sutra Sthana 16, Verse 37 - 38 Page no: 680.
6. Sushruta, Sushruta Samhita with the Nibandha sangraha commentary of Sri Dalhanacharya and Nyayachandrika paanjika of Sri Gayadasacharya on Nidana Sthana edited by Vaidya Jadavji Trikamji acharya & Narayan Ram Acharya 'Kavyatirtha'; Chaukhambha Orientalia, Varanasi, Reprint: 2015, sutrasthana, chapter 38 verse 7Page no :451
7. Sushruta, Sushruta Samhita with the Nibandhasangraha commentary of Sri Dalhanacharya and Nyayachandrika paanjika of Sri Gayadasacharya on Nidana Sthana edited by Vaidya Jadavji Trikamji acharya & Narayan Ram Acharya 'Kavyatirtha'; Chaukhambha Orientalia, Varanasi, Reprint:2015, shareerasthana, chapter 9, verse 8-9, Page no: 385
8. Sushruta, Sushruta Samhita with the Nibandha sangraha commentary of Sri Dalhanacharya and Nyayachandrika paanjika of Sri Gayadasacharya on Nidana Sthana edited by Vaidya Jadavji Trikamji acharya & Narayan Ram Acharya 'Kavyatirtha'; Chaukhambha Orientalia, Varanasi, Reprint:2015, chikithsa sthana chapter 24, verse 49, verse 8-9, Page no :489
9. Agnivesha, Charaka Samhita with the Ayurveda - Dipika commentary of Chakrapanidatta, edited by Vaidya Jadavji Trikamji acharya; Chaukhambha Orientalia, Varanasi, Reprint: 2015, Sutra sthana, chapter 13, verse 44, Page no: 84.
10. Sushruta, Sushruta Samhita with the Nibandha sangraha commentary of Sri Dalhanacharya and Nyayachandrika paanjika of Sri Gayadasacharya on Nidana Sthana edited by Vaidya Jadavji Trikamji acharya & Narayan Ram Acharya 'Kavyatirtha'; Chaukhambha Orientalia, Varanasi, Reprint: 2015, Chikithsasthana chapter 33 verse 34 Page no : 519
11. Agnivesha, Charaka Samhita with the Ayurveda - Dipika commentary of Chakrapanidatta, edited by Vaidya

Jadavji Trikamji acharya; Chaukhambha Orientalia, Varanasi, Reprint: 2015, Sidhi sthana chapter 1, verse 17 Page no: 680

12. Vagbhata, Astanga Hrudaya with the commentaries of Sarvanga sundara of Arunadatta and Ayurveda rasayana of Hemadri, edited by Pt. Bhashagacharya Harishastri Paradkar Vaidya, Chaukhambha Orientalia; Varanasi, Reprint: 2014, sutra Sthana chapter 20 verse 21 Page no: 291.
13. Vagbhata, Astanga Hrudaya with the commentaries of Sarvangasundara of Arunadatta and Ayurvedarasayana of Hemadri, edited by Pt. Bhashagacharya Harishastri Paradkar Vaidya, Chaukhambha Orientalia; Varanasi, Reprint: 2014, chikitsa Sthana chapter 21 vere 73- 81, Page no: 728.
14. Sushruta, Sushruta Samhita with the Nibandhasangraha commentary of Sri Dalhanacharya

and Nyayachandrika paanjika of Sri Gayadasacharya on Nidana Sthana edited by Vaidya Jadavji Trikamji acharya & Narayan Ram Acharya 'Kavyatirtha'; Chaukhambha Orientalia, Varanasi, Reprint:2015, Chikitsasthana, Chapter 40, Verse 22 Page no: 555

How to cite this article: Deepanjali T, Kiran M Goud, Dr. Shreyas D.M. An observational study to evaluate the efficacy of Rookasha Poorvaka Virechana Karma followed by Nasya Karma in the management of frozen shoulder (Avabahuka) in Madhamedha w.s.r. to DM Type-2. J Ayurveda Integr Med Sci 2019;6:61-66. <http://dx.doi.org/10.21760/jaims.4.6.11>

Source of Support: Nil, **Conflict of Interest:** None declared.

Copyright © 2019 The Author(s); Published by Maharshi Charaka Ayurveda Organization, Vijayapur (Regd). This is an open-access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.