

THERAPEUTIC EFFICACY OF PANCHAKARMA IN MUSCULAR DYSTROPHY- A CASE STUDY

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ABSTRACT

Muscular Dystrophy is a catastrophic heritable condition caused by X-linked neuromuscular disorder due to mutations in the gene containing dystrophin protein, it affects only males. Due to the absence of dystrophin protein, there is progressive muscle weakness and wasting that ultimately causes degeneration of muscles. There is no treatment in any system of medicine which has any definite impact upon Muscular dystrophy. In *Ayurveda*, there is some hope. Treatment involving *Ayurvedic* medicine especially *Panchkarma* has shown definite protective and rehabilitating influence and longer survival upon Muscular dystrophy.

Key words: *Panchkarma*, Muscular dystrophy, *Shashtikshalipinda Sweda*, *Vasti*, *Udvaartana*

INTRODUCTION

The word dystrophy comes from Latin and Greek roots meaning “faulty nutrition”. Doctors first began describing muscle diseases in 19th century. In muscular dystrophy there is progressive weakness and degeneration of the skeletal or voluntary muscles. Major forms of muscular dystrophy are myotonic, Duchene, Becker, Limb Girdle, fascioscapular.¹ Muscles of heart and some other involuntary muscles are also affected in some forms of muscular dystrophy. In *Ayurveda*, *Acharyas* carefully

consider this condition as *Adibala-pravrit* (disease that occurs by defects in *shukra* i.e. spermatozoa and *shonita* i.e. ova or we can say hereditary) with *Mansagata Vata* (*Vata dosha* vitiation in *Mans dhatu*) due to *Srotorodha* (obstruction in tissue microchannels). There is depletion of *Dhatvagni* (metabolism) paving the way of *ama* (toxins) formation,² followed by vitiation of *Kaphadosha*. While *Srotorodha* produces hypertrophy in particular region, *Vata* is manifested first as *Prakopa*

(vitiation) and then depletion of its qualities. This complex pathogenesis may be responsible for progressive wasting and necrosis of the affected muscle fibers.

CASE REPORT:

A 12 yrs old male patient, native of Saharanpur, U.P. was admitted in hospital of Rishikul Campus, UAU, Haridwar in November 2105 with chief complaints of-

- Weakness in lower limbs,
- Difficulty while walking, climbing stairs and running since 4 years.
- Decreased muscle bulk around pelvic and thigh region and increased muscle bulk in calf muscles since 3 years.

Detailed history of patient reveals that he was asymptomatic 4 years back. Then gradually he developed difficulty while running and climbing stairs, difficulty in getting up from squatting position. Subsequently, this problem worsens and after few months he started feeling difficulty even while walking. Along with this he also noticed decrease in muscle bulk around pelvic and thigh region with increasing muscle bulk in B/L calf region. The condition of patient was getting worse day by day.

A course of *Ayurvedic Panchkarma* treatment and some conservative treatment was given to him before 6 month. During this period he got some improvement in walking but after some time symptoms relapse.

Patient also has family history of same illness as Among 5, 4 of his uncle from maternal side died due to same disease. While rest one is healthy. Patient's real brother also affected from same problem.

On General Examination: we have found no significant anomaly in vital signs.

☉ **Gait - Waddling gait**

☉ **Reflexes-**

Knee jerk- Right - + Left - +

Ankle jerk- Right - ++ Left - ++

Biceps jerk- Right - ++ Left - ++

☉ **Muscle tone –**

Upper limbs- Normal (B/L)

Lower limbs- Mild hypotonic (B/L)

☉ **Pseudo-hypertrophy** of B/L calf muscles

☉ **Spine curvature** - Mild Lumbar lordosis present

☉ **Sensory Impairment** – Not present

☉ **Gower's sign** - +ve

By analyzing, the patient was diagnosed as *Mamsagatavata*, according to *Acharya Charaka*.³

Simple random single case study.

Total sittings of treatment – 4

Total duration- 2 years

1st sitting

1. *SarvangAbhyanga* (*Mahanarayana* oil) - 14 days

2. *YapanaBasti* (*MamsaRasa*) - 8 days

Table 1: TREATMENT GIVEN

Sr. No	Dravya	Dose	Duration	Anupana
1.	<i>Giloysatva</i>	500mg	Bd	Milk
	<i>Shunthichurna</i>	1 gm		
	<i>Ashwagandhachurna</i>	3gm		

2.	Syp. Livomin	15ml	Bd	Normal Water
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Treatment during follow up-

1. *Phalatrikadi Kwath* - 30 ml BD empty stomach
2. *Chitrakadi Vati* - 1 tab. TDS with luke warm water
3. *Trayodashang Guggulu* - 1 tab. TDS with luke warm water
4. *Ashwagandha Churna* - 3 gm. BD with milk
5. *Drakshasava*- 15 ml. BD after meal

2nd sitting

1. *Tail Dhara (Dhanwantar oil)* - 14 days
2. *Yoga Vasti-Dashmool Kwath Niruha Anuvasana - Dhanwantar oil*

Follow up treatment:

1. *Trayodashang Guggulu*- 1 tab. TDS with luke warm water
2. Tablet Neo - 1 Tab. BD
3. *Shunthi Churna* - 1 gm.
Ashwagandha Churna - 3 gm. BD with milk

3rd sitting

1. *Udvardana* – 3 days followed by *Shashti-ShaliPinda Sweda* for 14 days
2. *Yoga Vasti–Yapana Vasti (Mamsa Rasa)*

Follow up treatment:

1. *Sh. Kupilu* - 50mg.
Rasa Sindura - 125mg.
Shankh Bhasma - 500 gm.
Ashwagandha Churna - 3 gm. BD with milk
2. *MashabaladiPachana Kashaya*- 50 ml. BD empty stomach

4th sitting

1. *Udvardana* for 3 days followed by *ShashtiShaaliPinda Sweda* – 14 days
2. *Yoga Vasti- Dashmool Kwath Niruha Anuvasana - Dhanwantar oil*
3. *Narsingh Churna* - 5 g. BD with luke warm water
4. *Trikatu Churna* - 1 gm.
Ashwagandha Churna - 3 gm BD with milk.

Table 2: Comparison of Sign and Symptoms Before and After Treatment

PARAMETRES			BT	AT
Muscle Bulk	Thigh:	Right	12.5 inch	13 inch
		Left	12.5 inch	13 inch
Calf muscles hypertrophy			14.2 inch	13.8 inch
Reflex (knee jerk)			Diminished	Diminished
Power (lower limb)				
		Right	4 ⁺ /5	4 ⁺ /5
		Left	4 ⁺ /5	4 ⁺ /5
Toe walking			Present	Not Present
Serum CPK			916U/L	256U/L

DISCUSSION

Muscular dystrophies according to *Ayurveda* has many correlations and we can consider

this patient with *Mansgatavata* and *Snayugatavata* where symptoms are like tiredness and pain on little walk (*Saruk shramitamatyar-*

tham) and *Khalli* (pain in feet, calf, thigh regions) *Kubjatvam* etc.⁴ Muscular dystrophies are genetic disorders and as this patient also shows strong past history of it, we can consider it as *Adibala-pravrita Vyadhi* (disease that occurs by defects in *shukra* i.e. spermatozoa and *shonita* i.e. ova) viz. *Shushruta's vyadhi Vargikarana*⁵ (i.e. Classification of Diseases). Here pathogenesis occurs due to *Beejbhagavyavaadushti* (i.e. Sex-linked disease). As *Vata dosha* is the primal constituent of the living body and is responsible for functions of central, autonomic and peripheral nervous system.⁶ Here due to some mutation in X-Chromosome there will be pathetic functioning of *Vata* which further leads to its vitiation and *Sthansanshraya* (occupying) in *Mans* and *Medo dhatu* and vitiates and depletes these *Dhatu*s (X-linked progressive degenerative disorder of muscle tissue).⁷ Simultaneously, there will be formation of *Aam* (toxins) which leads to *Srotorodha* (obstruction) and *Vata dosh* vitiation. There will be hypertrophy in particular region and wasting in other region due to *Vata dosha* vitiation. In that case there is no satisfactory treatment in any system of medicine because of progressive degeneration nature of disease. In *Ayurveda*, *Abhyanga* (oil massage) helps in subsiding *Vata dosha* and improves the tone of muscle and compactness of body. *Ayurvedic Til mash pinda Swedana* increases the metabolic activity and improves the membrane defect. *Acharya Charaka* has mentioned *Vasti* as *Ardha chikitsa* (half-treatment) and best treatment for vitiated *Vata*.⁸ The Herbo-mineral drugs works on *Dhatvagni* hence giving nutrition to subsequent *Dhatu*s. We have noticed muscle bulk increase

in pelvic region and decrease in hypertrophy in calf region. How the lack of sarcolemma protein dystrophin gives rise to the final disease status is not clear. It should be investigated in the light of possible influence on sarcolemma membrane. There is further need of controlled studies and multi center clinical trials on large scale with improved study design and assessment techniques.

CONCLUSION

In the condition like myopathies where progression of disease is very fast and fatal and no cure is available in modern medicine the *Ayurvedic* treatment proved to slow down the progression of disease and bring out a mild improvement.

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