



## Case Report

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# An Ayurvedic approach to the Treatment of Ataxia – A case study

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## ABSTRACT

Progressive Cerebellar Ataxia inherited by autosomal dominant transmission is known as 'Spinocerebellar Ataxia' (SCA) which is a neurological disorder. The global prevalence of ataxia is 0.3 – 2 per 1,00,000 population. The prevalence varies significantly depending on the race, place of birth and founder effect. The symptoms and signs of ataxia consists of gait impairment, unclear speech, visual blurring due to nystagmus, poor co – ordination and tremors with the movements. This leads to the dependency of the patient on the others for routine work. In the present study, a case previously diagnosed as spinocerebellar ataxia treated with Ayurvedic treatment is reported. A 55years old female patient having complaints of imbalance while walking, giddiness, unclear speech, poor co-ordination and tremors was treated with *Shalishashtik Pinda Sweada* over extremities, *Nasya* with *Ksheerbala Taila*, *Shirodhara* and *Padabhyanga* with *Tila Taila* and *Baladi Niruha Basti* (enema) for 28days. Along with these *karma*, internal medicines were also given.

**Keywords:** Spinocerebellar ataxia, inco – ordination of movements, *Shalishashtik Pinda Sweada*, *Nasya* with *Ksheerbala Taila*, *Baladi Niruha Basti*, SARA.

## INTRODUCTION

Ataxia defines the disturbances of co-ordinated muscle activity [1]. It is the degenerative disorder of cerebellum, its afferent or efferent connections [2]. SCA2 (spinocerebellar ataxia 2) is a common ADCA (Autosomal Dominant Cerebellar Ataxias) which is about 13% -18% of total ADCAs and the age of onset of symptoms is variable ranging from 6 to 67 years whereas the symptoms usually begin in the 3<sup>rd</sup> or 4<sup>th</sup> decade of life [3]. The common sign and symptoms of Ataxia includes gait impairment, imbalance while walking with impaired walking pattern, poor co-ordination of movements and tremors, visual abnormalities, speech disturbances, sensory loss for vibration, abnormal reflexes and irregular pattern of swallowing [4]. Autonomic abnormalities like hypohydrosis, urinary dysfunction, hampered muscle functions within or surrounding the eyes and muscular atrophy in the distal portions of limbs [4]. Patients are also complaining of disturbed and irregular sleeping pattern [4]. All these things lead to dependency of patient on the others for the routine work. There is no any approved drug or any specific treatment effective for this disease. *Ayurveda* describes this disease as a *vaatavyadhi* and this study aims to relieve the intensity of common symptoms of this disease with an *ayurvedic* approach.

## Aim

To evaluate the effect of *ayurvedic* treatment on common signs and symptoms of spinocerebellar ataxia by using SARA scale.

## Objective

1. To study the common signs and symptoms of spinocerebellar ataxia.
2. To study the relief in common signs and symptoms of spinocerebellar ataxia by an ayurvedic treatment.
3. To study the efficacy of *Baladi yapana basti* in *dhatukshayanita vaatavyadhi* like SCA.

## MATERIAL AND METHODS

A clinical case study of spinocerebellar ataxia in our institute.

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## A. Primary data

Patient Name – XYZ  
Age / Sex - 55years / Female  
Address - Nanded  
Occupation - Housewife

## B. Present Complaints with duration

1. Imbalance while walking - since 3 years
2. Giddiness - since 3 years
3. Poor co-ordination of movements with - since 3 years
4. tremors
5. Heaviness of body with tingling sensation - since 6 months

## C. Past History of illness

No H/O DM / HTN / Bronchial Asthama  
H/O chicken gunia – 10 years back  
H/O abdominal hysterectomy in 2007  
H/O blood transfusion (3 points during and 2 points after the operative)  
H/O TL before 25years  
No H/O any addiction

## D. Present History

Patient was suffering from above complaints since last 3 years. Initially she had imbalance while walking and was unable to stand from sitting position. She felt giddiness all the time. There was poor co-ordination of movements along with tremors, firstly in the lower limb and then progressing to the upper limb. This led to dependency of the patient on the others for the routine work. She also felt heaviness of body with tingling sensation which hampers the daily activities. So, patient had previously consulted to the neurophysician for the same complaints and diagnosed as SCA but didn't get significant relief with the allopathic treatment. Hence the patient came to our institute for the *ayurvedic* treatment.

**INVESTIGATIONS** - All haematological investigations were WNL.

**MRI CERVICAL SPINE**-31/12/16 –Cervical spondylosis with diffuse posterior bulge at C6 – C7.

**MRI BRAIN** -31/12/2016- Multiple lacunar altered signal intensity areas in the bilateral fronto-parital lobes, white matter, corona radiata represent demyelination/ischemic areas.

**MRI DORSAL SPINE**-12/1/2017- Thoracic disc degenerations.

## E. Samanya Parikshana

*Nadi* – 68/min  
*Mala* – after every 1 or 2 days, *Sakashta malapravartana*  
*Mutra* – Frequent micturition, no dribbling and burning micturation  
*Jivha* – *Saam*  
*Shabda* – *Avishesha*  
*Sparsha* – *Samashitoshna*  
*Drik* - *Avishesh*  
*Aakruti* - *Krusha*

## F. Srotas Parikshana

*Annavaha* - *Kshudhamandya*  
*Rasavaha* - *Karshyatva, daurbalya*  
*Majjavaha* - Imbalance while walking, giddiness  
*Aartavavaha* - H/O hysterectomy

## G. Neurological Examination [5]

### Muscle Power –

**Table 1:** Showing muscle power of four limbs of patient

	Right Limb	Left Limb
Upper Limb	4+	4+
Lower Limb	4	4

### Reflexes

**Table 2:** Showing bilateral reflexes of the patient

REFLEXES	RIGHT	LEFT
Biceps	Exaggerated	Exaggerated
Triceps	Exaggerated	Exaggerated
Knee	Exaggerated	Exaggerated
Ankle	Exaggerated	Not elicited
Planter	Babinski sign positive	Withdrawal

**Romberg sign** – Positive

**Tandem walking** - Positive

### Co-ordination Tests

1. Finger -Nose -Finger Test - Bilaterally Affected
2. Rapid alteration of movements (Dysdiadochokinesia) - Bilaterally Affected
3. Heel -Shin Test - Bilaterally Affected

**Sensory Examination** – NAD

## H. Nidan Panchak

*Hetu* - *Rukshaahar, Katurasadhikasevana, Paryushitaahar sevana, Aniyamita bhojan kala, Atyadhika upavasa, Mala-mutra vegavarodha, Atibharavahana*

**Poorvarupa** – *Avyakta*

**Rupa** – Imbalance while walking, Giddiness, Poor co-ordination of movements with tremors, Heaviness of body with tingling sensation

**Upashaya** - *upashayanugami*

**Samprapti –**

*Hetusevana (prayaha vataprakopaka)*



*Rukshata, kharata, parushata produced in different srotas*



*Vayupuran at riktasthana i.e. prakupita vayu 'kha' vaigunyasthanashrita*



*Dhatukshayanita i.e. Nirupastambhita Vatavyadhi*

## I. TREATMENT PROTOCOL

**Table 3:** Showing the treatment given to the patient

DAYS	TREATMENT	DRUGS	DOSE	TIMING	VISHESH
1 <sup>st</sup> Day	<i>Sadya Virechana</i>	<i>Triphala kwath</i> <i>Eranda Sneha</i>	30ml 20ml	<i>Annakala</i>	3 vega, <i>Sansarjana karma</i> for 1 day
1 <sup>st</sup> - 28 <sup>th</sup> Day	<i>Sarvanga Abhyanga</i>	<i>Bala Taila</i>	60-70ml	Morning for 15-20 min	<i>Sukhoshna tailane abhyanga</i>
1 <sup>st</sup> -28 <sup>th</sup> Day	<i>Sarvanga Nadiswedana</i>	<i>Erandapatra,</i> <i>Nirgundipatra kwath</i>	500ml	Morning	Done upto patient's tolerance limit
3 <sup>rd</sup> -28 <sup>th</sup> Day	<i>Shalishashtika Pindasweda</i>	<i>Bala churna,</i> <i>Ashwagandha churna,</i> <i>Shalishashtik tandula</i> <i>Godugdha</i>	5gm 5gm 100gm 125ml	Morning for 25 – 30 min	<i>Pottali</i> made with <i>suswinna tandula</i> dipped in <i>sukhoshna Godugdha</i>
3 <sup>rd</sup> -28 <sup>th</sup> Day	<i>Nasya</i>	<i>Ksheerbala Taila</i>	Initially 4 drops which were later raised to 6 drops in each nostril	Morning	<i>Sthanik snehana swedanapurvak nasya</i> done followed by <i>gandusha</i> with <i>sukhoshna jala</i>
3 <sup>rd</sup> -28 <sup>th</sup> Day	<i>Shirodhara</i>	<i>Tila taila</i>	500ml	<i>Pratahkala</i> for 20min	Followed by <i>sthanik sawahana</i>
3 <sup>rd</sup> -28 <sup>th</sup> Day	<i>Padabhyanga</i>	<i>Tila Taila</i>	20ml	<i>Nishakala</i>	<i>Sukhoshna taila</i> used
3 <sup>rd</sup> -26 <sup>th</sup> Day	<i>Basti</i>	<i>Baladi yapana Basti</i> <i>Dashmoola kwath niruha</i> <i>basti</i>	100ml 750ml	<i>Adhobhakta</i> <i>Annakala</i>	3 <i>yapana</i> + 1 <i>niruha</i> -consecutive 6 cycles done

## *Shamana Aushadhi*

**Table 4:** Showing *shamana aushadhis* administered to the patient

SR. NO.	KALPA	MATRA	SEVANA KALA	ANUPANA
1.	<i>Gandharva Haritaki Churna</i>	5gm – BD	<i>Apanakali</i>	<i>koshna jala</i>
2.	<i>Tapyadi Lauha Vati</i>	250mg -1BD	<i>Bhojanottar</i>	<i>koshna jala</i>
3.	<i>Cap Dhanvantar Taila</i>	1BD	<i>Bhojanottar</i>	<i>koshna jala</i>
4.	<i>Vidaryadi Kashaya</i>	30ml – BD	<i>Bhojanottar</i>	<i>koshna jala</i>

## RESULTS

The assessment of the patient was done with the help of SARA – Scale for Assessment and Rating of Ataxia [6]. This scale was developed by Schmitz-Hubsch and others. It is used for the assessment of various impairments in cerebellar ataxia. The scale consists of eight categories

for the examination of gait, examination of stance for walking pattern, examination of sitting position, examination of speech pattern, finger chase for examination of dysmetria, nose – finger test for co-ordination and tremors, rapid alternating hand movements for dysdiadochokinesia and heel shin slide for co-ordination and tremors. Before the treatment, SARA score was 16.5 which was reduced to 9 after the treatment. It was

found that patient has less imbalance while walking, moderate reduction in the complaints of giddiness and improvement in the constipation. The inco-ordination of movements was markedly corrected and this leads to improvement in the quality of life.

#### OVERALL ASSESSMENT WITH THE HELP OF SARA SCALE

**Table 6:** Showing overall assessment of the patient

SR. NO.	CRITERIA	SCORE BEFORE T/T	SCORE AFTER T/T
1.	Examination of gait	3	3
2.	Examination of stance for walking pattern	3	2
3.	Examination of sitting pattern	1	0
4.	Examination of speech pattern	0	0
5.	Finger chase for examination of dysmetria	3	2
6.	Nose – finger test for co-ordination and tremors	2.5	1
7.	Fast alternating hand movements for dysdiadochokinesia	3	0
8.	Heel shin slide for co-ordination and tremors	1	1
	<b>Total score</b>	<b>16.5</b>	<b>9</b>

#### DISCUSSION

1. SCA is a neurodegenerative disorder caused due to degenerative changes in the cerebellum. The patient was diagnosed as *dhatukshayajanya – nirupastambhit vaatyadhi*. The general line of treatment for *nirupastambhita vaatyadhi* was taken into consideration [7].
2. On the day 1<sup>st</sup>, *sadya virechana* was given for *koshthashuddhi*. Then considering the *dhatukshaya*, the *santarpana chikitsa* in the form of *Baladi yapana basti* was used as it causes *yapana* of *aayushya* along with its *dirghakalanuvartana* [8].
3. *Sarvanga abhyanga* and *nadiswedana, shirodhara, padabhynga* all these are *balya* and *vatahara karma*. These *karmas* enhance the muscle power and thus helps in attaining the maximum balance of body.
4. *Shirodhara* and *padabhynga* also helps in reduction of anxiety along with marked reduction in disturbed sleep pattern. For this purpose, *tila taila* is used which is *snehaniya* and *shreshtha vatahara dravya* [9].
5. The *shalishashtika pinda swedana* helps in the nourishment of muscles and peripheral nerves as the ingredients used are *balya, rasayana* and *vatahara* property and thus gives strength to the patient for the independent routine activities.
6. *Nasya karma* helps in reducing the giddiness by acting on CNS and gives strength to *twacha, skandha, griva, aasya, vaksha* [10].
7. By the side of these *karma*, internal medicines were given. The *Gandharva Haritaki Churana* helps in reducing the constipation and *saamata* and improves the *samyaka malapravartana* and *kshudha*. *Tapyadi Lauha Vati* itself causes *rasayana karma* as it is *amrutopamam*. Capsule *Dhanvanatar Taila* and *Vidaryadi Kashaya* have *Bala* and *Vidari* as main ingredient respectively and both are *balya, vatahara* and *rasayana*.

8. The assessment was done with SARA scale which was previously 16.5 and reduces to 9 after the treatment. It was found that patient has less imbalance while walking, marked reduction in the complaints of giddiness, constipation and disturbed sleep pattern. The poor co-ordination of movements and tremors were markedly corrected and this leads to improvement in the quality of life and betterment of routine work of pt.
9. Thus, there was no worsening of any sign and symptom and SCA patient was treated with *ayurvedic* treatment satisfactorily.
10. Patient was asked to continue the internal medicines along with *sarvanga abhyanga* for 1 month and advised for the follow up to repeat the *karma* if necessary.

#### CONCLUSION

The holistic approach by *Ayurvedic Shodhana* and *Shamana Chikitsa* is helpful in the treatment of ataxia. *Acharya Charaka* had mentioned that in case of *dhatukshayajanya* or *nirupastambhit vaatyadhi*, in order to reduce the *kharata, rukshata, parushata* of all *srotasas, snehana* is of prime importance. The *snehana karma* can be done by any route like *bahya snehana* as *abhyanga, shirodhara* and *abhyantar snehana* like *basti, nasya* and also by using internal medicines. This multidimensional approach of *vaatyadhi chikitsa* is helpful in treating the neurological disorders like SCA and has satisfactory outcomes.

**SOURCE OF SUPPORT – Nil**

**CONFLICT OF INTEREST – There is no conflict of interest**

#### REFERENCES

1. Munjal YP. Cerebellar disorders. API Textbook of Medicine. Vol. 2, 9<sup>th</sup> edition. Jaypee Brothers; page 1468.
2. Fauci, Braunwald, Kasper, Hauser, Jameson, Loscalzo, Ataxic disorders. HARRISON'S Principle of Internal Medicine. Vol 2, 17<sup>th</sup> edition. page 2565.
3. Munjal YP. Cerebellar disorders. API Textbook of Medicine. Vol. 2, 9<sup>th</sup> edition. Jaypee Brothers; page 1469.
4. Singh Survesh Kumar, Rajoria Kshipra, Ayurvedic Approach In The Management Of Spinocerebellar Ataxia, 2016 Jan-Mar, doi:10.4103/0257-7941.179873, <https://www.ncbi.nlm.nih.gov>, searched on 23/3/2019
5. Mehata PJ. Central nervous system. Practical Medicine, 20<sup>th</sup> edition, Mehata Shilpa, page 273-293
6. <http://www.physio-pedia.com>
7. Yadavji T. editor. Charaka Samhita of Agnivesha., Chikitsa Sthana, Ch-28, Ver. 75-82, 3<sup>rd</sup> edition, Varanasi: Chaukhambha Surbharati Prakashana; 2017, page 620.
8. Yadavji T. editor. Charaka Samhita of Agnivesha., Siddhi Sthana, Ch-12, Ver. 16/5, 3<sup>rd</sup> edition, Varanasi: Chaukhambha Surbharati Prakashana; 2017, page 732.
9. Yadavji T. editor. Charaka Samhita of Agnivesha., Sutra Sthana, Ch-13, Ver. 12, 3<sup>rd</sup> edition, Varanasi: Chaukhambha Surbharati Prakashana; 2017, page 82.
10. Garde G. Sartha Vagbhata, Sutra Sthana. Ch-20, Ver. 39, Varanasi: Chaukhambha Surbharati Prakashana; 2011. page 88.

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