

ROLE OF VAGSHUDHIKAR YOGA AND NASAYA KARMA IN GADGADA
(STAMMERING) – A CASE STUDY

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Article Received on 20/04/2019

Article Revised on 10/05/2019

Article Accepted on 30/05/2019

ABSTRACT

Man acquires prestigious position in life because of his unlimited thoughts and ambitions. It is his discriminative capacity and power expressing thoughts in the form of speech makes him to conquer all walks of life. Language development occurs most rapidly between 2 to 5 years of age. During this period of learning of speech, usually child begins repetition of consonants, often followed by repetition of words. If this condition continues then child suffers from disability of speech. Stammering is a disorder of human communication. The prevalence of stuttering is also highest among preschool children compared to school- age children and adults, with estimated prevalence rates of approximately 2.4%, 1%, and less than 1% for the three age groups, respectively.^[1] It is defined as disruption of fluency of verbal expression and is by spasmodic repetition and prolongation of vocal sounds by fear, anxiety and struggle to avoid speech errors. However, is not simply a speech difficulty, it is a serious communication problem. It can affect their interaction with others; impede their education and seriously hampers employment potential. A 5 years male child, having complaints of unclear speech (*aspastha vak*), blocks and prolongation of words (*avaykt vak*), broken words (*sputa vak*) was treated with *vagshudhikar yoga* and *nasaya karma* with *panchendriya vardhan taila* and changes were noted in symptoms such as unclear speech, blocks and prolongation in words and broken words. Details of the findings are discussed in this case report.

KEYWORDS: Stammering, *vagshudhikar yoga*, *nasya karma*, prevalence.

INTRODUCTION

In *Ayurveda* there is no special mentioning of speech disorders as a separate category. There are references in classics regarding the fluency disorders, developmental speech problems, voice problems etc. The speech problems mentioned in the classics are *Mooka*, *Minmina*, *Gadgada*, diseases of *Swara* like *Swarabheda*, *Vak Graha*. These conditions are coming under fluency problems, articulatory problems and voice problems. Also there are references regarding the lakshanas of *Swara* in other systemic disorders. The *Nidana*, *Samprapti* and *Lakshana* of the disease *Gadgada* is not elaborately mentioned in *Ayurveda* classics. *Gadgada* is mentioned in *Vatavyadhi Avarana Prakarana* by *Acharya Charaka*,^[2] and *Acharya Sushruta*.^[3] *Vruddha Vagbhata* mentioned *Gadgada* is due to intake of *Vata aggravating Aharavihara* by *garbhini*,^[4] *Sushruta* has given the explanation regarding the manifestation of Speech Disorders as *Vata* gets *Avarana* by *Kapha* in *Shabdavaha Dhamani* and produces *Mooka*, *Minmina* and *Gadgada*.^[5] *Charaka* said in *avarana pakarana* that *Gadgada* is the symptom produced by the *Avarana* of *Samana Vata* by *Prana Vata*,^[6] Also mentioned *Swara* and *Vak Sanga* occurs as a result of *Avarana* of *Udana Vata* by *Kapha*.

Lakshana: *Lupta pada vyanjanadi*,^[7] *Avyakta Vak*,^[7] *Aspashta vachana*,^[8] *Gardhabavat Swara*,^[8] *Sphuta Vak*,^[9] *Svalpa Asambaddha Vak*,^[10] *Gharghara Shabdha*.

In *Ayurvedic* classics the treatment procedures for *Gadgada* and other speech problems are not elaborately explained. *Acharya Charaka* and *Sushruta* explained the treatment of disease *gadgada* under the common *vatvadhi chikitsa*, *avarana* of *vata*.

Case discussion

A 5 years male child, having complaints of unclear speech (*aspastha vak*), blocks and prolongation of words (*avaykt vak*), broken words (*sputa vak*).

- Past history - NO H/O of any major illness, or any drug allergy.
- Antenatal history - NO H/O any major illness during antenatal period.
- Birth history – full term normal delivered, no h/o any insult during labour
- Developmental milestones – gross motor, fine motor and social developmental milestones are achieved as per age. monosyllables and bisyllables developed at the age of 13 months and 18 months of age respectively.

- Immunizations history –all vaccines are received as per recommended schedule
- On examination - Unclear speech (*aspastha vak*), blocks and prolongation of words (*avaykt vak*), broken words (*sputa vak*), strength of the words or vowels decreased, mild accessory behaviors like closing of eyes, moving eyes vertically or laterally, consistent loss of eye contact, facial grimacing are present.
- No any systemic, local muscular /anatomical abnormality found.
- Analysis of speech done by frequency, nature of repetition, and prolongation of words.
- Diet history- veg and non -veg diet.
- Past treatment history – no specific medication used for speech disfluency.
- Type of study – a case study
- Centre of study –*kaumarbharitya* opd, M.A.PODAR hospital, worli, Mumbai.
- Material and methods-
 1. *Vagshudhikar yoga* –*vacha, haritaki, kustha, pipali, jirak, sunthi, saindhav and yasthimadhu, churna* in same quantity which is easily available in market.
 2. *Panchendriya vardhan taila* for *nasya* which is easily available in market.
 3. *Madhu* available in market.

Method

Vagshudhikar yoga 1 gm. twice a day with *madhu*, dose decided as per patient *prakruti* and *bala*. *Nasya karma* with *panchendriya vardhan taila* for 21days. patient follow up after every 15 days.

Assessment criteria for evaluation of patient:

Andrew's & Harris 1964

Grade 0 - stutter not heard at interview

Grade 1 Mild stutter

Communication unimpaired

0-5% words stuttered

Grade 2 Moderate stutter

Communication slightly impaired

6-20% words stuttered

Grade 3 Severe stutter

Communication definitely impaired over 20% words stuttered

Their codings for symptoms were:

A: simple repetitions

B: Prolongations and hard blockings

C: Associated facial and body movements.

Grade 0- up to 20 sec

Grade 1- up to 30 sec

Grade 2- up to 40 sec

Analysis of speech done by using reading alphabet charts, recitation of days, and 0-45 counting for 2 min.

DISCUSSION

In this present case on the basis of *nidana* and *lakshana* such as unclear speech (*aspastha vak*), blocks and

prolongation of words (*avaykt vak*), broken words (*sputa vak*), strength of the words or vowels decreased, mild accessory behaviors like closing of eyes, moving eyes vertically or laterally, consistent loss of eye contact, facial grimacing; this case was diagnosed as a *gadgada* (stammering). As per mentioned In *sushrut* and *charak samhita* disease *gadgada* is caused by *avarana* of *vata dosha* (*udan, vayn, pran, saman*) by *kapha dosha*. Hence, was decided to treat disease *gadgada*, according to *samanya chikitsa* of *avrutta vata*. In *ashtang hrudiyattanttra acharya vagbhata* mentioned *vagshudhikar yoga* for speech disorder,^[11] and in *charak samhita acharya charaka* mentioned treatment for *udana vayu, udane yojayet urdhvam*,^[12] and *nasya karma* is indicated for *urdhavjatrugat vaydhi*. hence, *panchendriya vardhan taila* was decided for management of disease *gadgada*.

Probable mode of action of vagshudhikar yoga

Contents of *vagshudhikar yoga* are *vacha, haritaki, kustha, pipali, jirak, sunthi, saindhav and yasthimadhu*. *vacha* scrapes toxins from the subtle channels in the mind and opens *nadis* of the higher *chakras* and promotes higher mental functions and cerebral circulation which helps to improves memory (*medhya*), *vacha* has affinity for the throat of mucus and opens the lungs promoting fuller expiration and helps in the improvement of speech,^[13] (*swarya*) and shows improvement in the symptoms of *avayakt vak* (repetition and prolongation of words), and *sput vachana* (broken words). *Vacha & Kusta* are having spasmolytic & smooth muscle relaxant activity & also used in psychosomatic disorders. These properties are helpful in reducing symptoms, like repetition, block hard contacts, anxiety and stress in speech and thought process.^[14] *Haritaki, yasthimadhu, and sunthi* has the properties of *medhya* and *swarya*.

Yasthimadhu, haritaki, sunthi, pipali, jiraka, and kustha has the properties of *madhur, amla vipak, deepan pachan* and *anulomak* which helps to normalize *vata* and *kapha dosha*.

Saindhav has properties of *katu, deepan, pachan* so normalizes *vata* and *kapha dosha*. *Saindhav* has *sukshma*, and *yogvahi* in nature goes into the *sukshma stotas* and helps for *stotoshodhan*. Common treatment principle for *Avarana* is mentioned by *Acharya Charaka*. He states that after analyzing the disease condition, treatment should be done by drugs and by *Shodhana* of *Srotas*, the *kapha pitta avirodhi* and *vataanulomana* should be the main treatment principle in any *avarana* of *vata*. *vagshudhikar yoga* has the properties of *anabhishtyandi, snigdha, stotoshodhan, vatkaphashamak, and vatanuloman* which helps in the removal of *avarana* of *vata* by *kapha* and breaks the *samprapti* of disease *gadgada*. *Madhu* has properties of *sukshma* and *yogvahi* goes into the *stotas* and shows improvement in the symptoms of *avayakt vak, aspstha vak, and sput vak*. Hence *madhu* is selected as *anupana* for *vagshudhikar yoga*.

Observation of symptoms

Sr. no.	Symptoms	Gradation		
		Before treatment	Mid treatment	After treatment
1	Repetition of word	2	1	0
2	Prolongation of word	2	2	1
3	Hard blockings	2	2	1
4	Facial expression	2	2	1
5	communication	2	1	0
6	Stutter words	2	2	1

Probable mode of action of *nasya karma*

Acharya Charaka said in *avarana pakarana* that *Gadgada* is the symptom produced by the *Avarana* of *Samana Vata* by *Prana Vata*.^[6] Also mentioned *Swara* and *Vak Sanga* occur because of *Avarana* of *Udana Vata* by *Kapha*: Acharya Charaka has stated the common line of treatment of diseases which involves the *Udana Vata*. He has indicated *Urdhva Bhaga*,^[12] *Chikitsa*. *Gangadhara* said *avarana* of *udana vata* should be treated with *Urdvabheshaja*. Acharya *vagbhata* says *nasya* is indicated in *swarkshaya*,^[15] and also explains *tailam nasaye vatkapaharam*, hence *panchendriyevardhan taila* was decided for management of disease *gadgada*.

In *Astanga Samgraha* it is explained that *nasa* being the entry to *shiras* (head), the drug administered through nostril reaches *shringataka -a sira marma* by *nasa srotas* and spreads in the *murda* (Brain) reaches at a junctional place of *netra* (eye), *Srotra* (ears), *kantha* (throat) *siramukhas* (opening of the vessels) etc and remove or detach the morbid *doshas* present above supraclavicular region and expels them from the *uttamanga*.^[16] *Nasya karma* not only acts as *sirovirechana* i.e., elimination of *doshas* and as *shamana*, controlling the *doshas* but also plays vital role in nourishing the *panchagnandriya adhistana* located in *shiras*.^[17]

Mostly drugs have *vata pitagna* and *kapha vatagna* properties. The drug contains mainly *Teekshna* drugs like *Vidang* (*Embelica ribes*), *Pippali* (*Piper longum*), *nidigdika* (*solanum surratensa* Burm.f.), *twaka* (*cinnamomum zeylanicum* breyn.) which are responsible for the clearing of the channels. *Vaata* is considered as the controller of the mind. All the drugs are having the *Vaata hara* property with *Snigdha* and *Ushna guna*. So the pacification of the *Vaata* plays an important role in the action of the drug. The *Madhooka* (*Madhooka indica*),^[18] *madhur* and *swarya* in properties which help *vatashaman* and gives local strength and *Saindhava lavana* (*Potassium chloride*),^[19] are having *sushma* and *yogyahi* in nature which help for *strtoshodhan* and *vatkapha shaman*. *Draksha* (*Vitis vinifera*.), *Bala* (*Sida cordifolia*), *Anshumati* (*Desmodium gengeticum*), *Neelkamal* (*Nymphaea stellate*), *Manjishtha* (*Rubia cordifolia*) *Swadanshatra* (*Tribulus terrestris*), *Prapaundarika*, (*Nelumbo nucifera gaeris*.) drugs have *vata pitagna* properties *Brihati* (*Solanum indicum* linn.) *Rasna* (*Pluchea lanceolata*), *Nidigdika* (*Solanum*

surratensa), *Twaka* (*Cinnamomum zeylanicum*), *Til* oil (*Sesamum indicum*) have *kapha vatgna* properties.

The *Saindhavalavana* (*Potassium chloride*) is also having the *Sookshma* property which helps the faster penetration of the drug and faster initiation of the action.

In this present case study, after completion of *panchendriya vardhan taila nasya* for 21 days.^[20] it normalized the *vata*, *kapha dosha* and *avarana* of *udan vayu* by *kapha* through *shirovirechana* and also improved the strength of *indriya* which helped to break the *samprapti* of disease *gadgada* and showed improvement in the symptoms of *avayakt vak*, *aspasth vak*, accessory behaviour of the patient.

CONCLUSION

This study suggests that, *vagshudhikar yoga* and *panchendriya vardhan taila* showed significant result in treatment of *avyakta vak*, *aspasth vak*, broken words, and accessory behaviour of the patient and efficacy of the treatment was highly significant even during follow up. In this case study patient completed the full course of treatment without any adverse reaction to drug and therapy. Hence, it can be suggested that *vagshudhikar yoga* and *panchendriya vardhan taila nasya* can be used in patients suffering from *gadgada*.

Speech disfluency can undermine a person's self-esteem and social life; During and after treatment it was observed that there is improvement in the self-confidence and social involvement.

REFERENCES

1. Andrews et al., 1983; Beitchman, Nair, Clegg, & Patel, 1986; Bloodstein & Bernstein Ratner, 2008; 79.
2. Agnivesha. Charaka Samhita- Ayurveda deepika Chakrapani commentary, edited by Yadavji Trikamji Acharya, chikitsa sthana, vatavyadhichikitsitam, Varanasi: Chaukambha Surbharati Prakshan, 2005; 621.
3. Sushruta. Sushruta Samhita- Nibandha Sangraha Dalhana commentary, edited by Yadavji Trikamji Acharya, nidana sthana, vatavyadhi nidanopakrama, Varanasi: Chaukambha Surbharati Prakashan, 2003; 269.

4. Vriddha Vagbhata. Ashtanga Sangraha, Edited by Prof K R Srikanta Murty, vol 2, shareera sthana, garbhavyapat vidhi, Varanasi: Choukambha orientalia, 2012; 28.
5. Sushruta. Sushruta Samhita- Nibandha Sangraha Dalhana commentary, edited by Yadavji Triakamji Acharya, nidana sthana, vatavyadhi nidanopakrama, Varanasi: Chaukambha Surbharati Prakashan, 2003; 269.
6. Agnivesha. Charaka Samhita- Ayurveda deepika Chakrapani commentary, edited by Yadavji Trikamji Acharya, chikitsa sthana, vatavyadhichikitsitam, Varanasi: Chaukambha Surbharati Prakshan, 2005; 621.
7. Sushruta. Sushruta Samhita- Nibandha Sangraha Dalhana commentary, edited by Yadavji Triakamji Acharya, nidana sthana, vatavyadhi nidanopakrama, Varanasi: Chaukambha Surbharati Prakashan, 2003; 269.
8. Sushruta. Sushruta Samhita- Nibandha Sangraha Dalhana commentary, edited by Yadavji Triakamji Acharya, kalpa sthana, sthava visha vijnaneeya, Varanasi: Chaukambha Surbharati Prakashan, 2003; 565.
9. Vagbhata. Ashtanha Hrudaya, Sarvangasundara of Arunadatta, edited by Pt H S Sastri Paradakara, utara sthana, visha pratishedha adhyaya, Varanasi: Choukambha Surbharati Prakashan, 2002; 904-5.
10. Vagbhata. Ashtanha Hrudaya, Sarvangasundara of Arunadatta, edited by Pt H S Sastri Paradakara, nidana sthana, madatyaya nidana, Varanasi: Choukambha Surbharati Prakashan, 2002; 488.
11. Asthanga Hridaya Uttar Tantra Volume 1 and 2 by Dr.Brahmanand Tripathi 1ST edition Published by Chaukhamba Sanskrit Pratishthan, Delhi Chap-1/49, 885.
12. Charaka Samitha Chikitsa sthana - 2nd part by Dr Satyanarayan Shastri, published by Chaukhamba Bharti Academy Varanasi, Chap-28/2/9, 220.
13. www.dharamonyherb.com/vacha.
14. Central nervous system studies on an ethanol extract of Acorus calamus rhizomes (S. B. Vohora, Shaikat A. Shah and P. C. Dandiya Departments of Pharmacology and Biochemistry, Institute of History of Medicine and Medical Research New Delhi.
15. Asthanghridayam brahmanand tripathi hindhi commentary, chaukhambha prakashan, reprint, 2011; 20/3: 245.
16. Vagbhata; Astanga samgraha, Sutra sathana, 29th Chapter, 2nd Sloka, Vol – 1, Page No. 511 Translation by K.R.Srikantha Murthy, Chaukhambha Orientalia.
17. Kashayapa samhita edited by prof. p.v. tewari English translation and commentary, chukhambha visvabharti publication, kalpasthana chap, 2013; 6/32-40: 347.
18. Sharma P.V. Dravyaguna Vijnana, Vol-II, Chaukhambha Bharati Academy, page 253, Reprint, 2006.
19. Kashinath Pandeya, Charaka Samhita, Hindi Commentary, Chaukhambha Bharati Academy, Reprint, 2005; 97.
20. Sushrut sahita of sushruta nibandhsangraha commentary by dalhanacharya, vaidya yadavji trikamji chaukmbha surbharti prakashan, Varanasi edition, 2012; 40/22: 555.