



A CRITICAL REVIEW ON VATAJA KASA IN CHILDREN

Chethan Kumar V.K.^{1*}, Shailaja U.², Harshitha M.S.³

¹Dept. of Kaumarabhritya, S.D.M. College of Ayurveda, Udupi, Karanataka, India

²Dept. of Kaumarabhritya, S.D.M. College of Ayurveda, Hassan, Karnataka, India

³Dept of Shareera Rachana, Alva's Ayurveda Medical College, Moodabidri, Karnataka, India

Received on: 12/10/2011 Revised on: 09/01/2012 Accepted on: 10/02/2012

*Corresponding author

Dr. Chethan Kumar V.K., Asst. Prof., Dept. of Kaumarabhritya, S.D.M. College of Ayurveda, Udupi, Karanataka, India

Email: drchethankumar@gmail.com

ABSTRACT

Uchhwasa and Nishwasa are the sine que non-phenomenon of life. To and fro movement of air through the Pranavaha srotas is the vital sign of life, the normalcy of which suggests health. The abnormality in respiration indicates disease and its cessation makes death. This unique sign of life is affected in the disease Kasa. In Ayurveda Kasa is explained as a separate disease entity with the explanation of specific nidana, poorvarupa and treatment.

Keywords Vataja, Kasa, Nidana, Poorvarupa, Roopa, Upashaya, Samprapti, Chikitsa

INTRODUCTION

The word "Vataja Kasa" consists of two components viz., Vataja and Kasa.

Vataja - The word Vata belongs to "pullinga" derived from the root va- gati gandhanayoho and "tha" prathyaya giving the meaning "to move", "to make known", "to enlighten". Ja means "produced by".

Kasa - Kasa word is derived from the root "Kasri" i.e. "shabda kutsanyam" which means "unpleasant sound". Gangadhara, the commentator describes kasa from the dhatu "kasri", which means "bhinnaswara". Commentator Chakrapani derived the word kasa from the root 'kas' i.e. "gati-shatanayoh" which means "falling movement.

Vataja Kasa (dry cough) is one of the common complaints in day to day pediatric practice and it is also a symptom of various diseases of respiratory system. Vataja Kasa though it is not life threatening, it troubles the child as it hinders the day to day activity. Recurrent attacks makes the school going child suffer and may have its adverse effects on the studies of the child. Many references are

available related to Vataja kasa. In this article different views of different Acharyas are compiled in brief.

Paribhasha

Acharya Charaka defines kasa as release of obstructed vayu resulting in the production of abnormal sound in the process which may be productive or dry.¹

Chakrapani dutta has commented on the word Kasa as in drawing of chest wall (Ura) during coughing.

Acharya Sushruta defined kasa as the disease associated with a typical sound similar to sound obtained from broken bronze vessel.

According Sanskrit English dictionary by Sir Monier Monier Williams kasa means "cough".²

Literary Review

Nidana (Table 1)

Poorvarupa

There is no specific poorvarupa told for individual type of Kasa in classics. So the saamaanya poorvarupa told for the Kasa can only be taken as the poorvarupa of the Vataja Kasa. (Table 2)

Table 1: Nidanas of Vataja Kasa

SN	Nidana	C.S	S.U	A.S	M.N	Y.R	B.P	G.N	B.R	B.S	H.S
Aharaja											
1.	Rookshaahara sevana	+	+	+	+	+	+	+	+	+	-
2.	Ati kashayarasa ahara sevana	+	+	-	-	-	-	-	-	-	-
3.	Sheeta ahara sevana	+	+	-	-	-	-	-	-	-	-
4.	Asatmyaahara sevana	-	+	-	-	-	-	-	-	+	+
5.	Alpa ahara sevana	+	-	-	-	-	-	-	-	-	-
6.	Bhojanasya vimargagamana	-	+	-	+	+	+	+	+	-	-
Viharaja											
7.	Dhoomopagata	-	+	-	+	+	+	+	+	+	-
8.	Rajasevana	-	+	-	+	+	+	+	+	-	+
9.	Shrama	+	+	+	+	+	+	+	+	+	+
10.	Vegavarodha	+	+	+	+	+	+	+	+	+	-
11.	Hasyapraharshya	-	-	-	-	-	-	-	-	-	+
12.	Anila sannirodha	-	-	-	-	-	-	-	-	-	+
13.	Vega udeerana	-	-	+	-	-	-	-	-	-	-
14.	Ratri jagarana	-	-	+	-	-	-	-	-	-	-
15.	Kshavathu dharana	-	+	-	+	+	+	+	+	+	-

Table 2: Poorvarupa of Kasa

SN	Poorvarupa	C.S	S.S	A.S	A.H	M.N	B.P	G.N
1.	Shooka purana gala	+	-	+	+	+	+	+
2.	Shooka purana asya	+	-	-	-	+	+	+
3.	Kanthe kandu	+	+	+	+	+	+	+
4.	Bhojyanamavarodha	+	+	-	-	+	+	+
5.	Arochaka	-	+	+	+	-	-	-
6.	Sashabdha	-	+	-	-	-	-	-
7.	Vaishamya	-	+	-	-	-	-	-
8.	Agnisada	-	+	-	-	-	-	-
9.	Gala lepa	-	+	-	-	-	-	-
10.	Talu lepa	-	+	-	-	-	-	-
11.	Hridaya Aswasthata	-	-	+	-	-	-	-
12.	kavala galane vyadha	-	-	-	-	-	+	-

Roopa (Table 3)

Table 3: Vataja Kasa lakshanas in different classics³⁻¹²

SN	Lakshanaas	C.S	S.S	A.S	A.H	B.S	M.N	B.P	Y.R	V.S	G.N
1.	Shushka Kasa	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2.	Kapha shushkataa	✓	X	✓	X	X	X	X	X	X	X
3.	Alpa and krucchra Kapha	✓	X	✓	X	X	X	X	X	X	X
4.	Hrutshoola	✓	✓	✓	✓	X	✓	✓	✓	✓	✓
5.	Parshwashoola	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.	Urahshoola	✓	X	✓	✓	✓	X	✓	✓	X	X
7.	Shirashoola	✓	✓	✓	✓	X	✓	✓	✓	✓	✓
8.	Swarabheda	✓	✓	X	X	✓	✓	✓	✓	✓	✓
9.	Shushka ura	✓	X	✓	✓	X	X	X	X	X	✓
10.	Shushka kanta	✓	X	✓	✓	X	X	X	X	X	✓
11.	Shushka vaktra	✓	X	✓	✓	X	X	X	X	X	✓
12.	Lomaharsha	✓	X	X	X	X	X	X	X	X	X
13.	Prataamyataa	✓	X	X	X	✓	X	X	X	X	X
14.	Nirghosha	✓	X	X	X	X	X	X	X	X	X
15.	Deenataa	✓	X	X	X	X	X	X	X	X	X
16.	Dourbalya	✓	X	X	X	X	X	X	X	✓	✓
17.	Kshobha	✓	X	✓	✓	X	X	X	X	X	X
18.	Moha	✓	X	✓	✓	X	X	X	X	X	X
19.	Snigdha, aamla, lavana Bhukte peete prashaamyati	✓	X	X	X	X	X	X	X	X	X
20.	Vega vahana of maaruta	✓	X	X	X	X	X	X	X	X	X
21.	Udara shoola	X	✓	X	X	X	✓	X	X	✓	✓
22.	Prasakta vega	X	✓	X	X	✓	✓	✓	✓	✓	✓
23.	Shankhashoola	X	✓	X	X	✓	✓	✓	X	✓	✓
24.	Kantashoola	X	X	✓	X	X	X	X	X	X	X
25.	Ksheena oja	X	✓	X	X	✓	✓	✓	✓	✓	✓
26.	Ksheena bala	X	✓	X	✓	X	✓	✓	✓	✓	✓
27.	Ksheena swara	X	✓	✓	✓	✓	✓	✓	✓	✓	✓
28.	Rujaaswana	X	X	X	✓	X	X	X	X	X	X
29.	Paaraavata ivakoojana	X	X	X	X	✓	X	X	X	X	X
30.	Kashamaanana	X	✓	X	X	X	✓	X	X	✓	✓
31.	Mahaavega	X	X	✓	✓	X	X	X	X	X	X
32.	Angaharsha	X	X	✓	X	X	X	X	X	X	X
33.	Prushta stambha	X	X	X	X	X	X	✓	X	X	X
34.	Vaksha shoola	X	X	X	X	X	X	X	X	X	✓
35.	Satata shteevana, Swalpa shushka	X	X	X	X	X	X	X	X	X	✓
36.	Aatopa	X	X	X	X	✓	X	X	X	X	X
37.	Shira manthana	X	X	X	X	✓	X	X	X	X	X
38.	Shooka poorna gala	X	X	X	X	✓	X	X	X	X	X
39.	Shushka nishteevana	X	X	X	X	✓	X	X	X	X	X
40.	Shushka nishteevana, mukte na kasate	X	X	X	X	✓	X	X	X	X	X
41.	Hrudayam avakupyati	X	X	X	X	✓	X	X	X	X	X
42.	Shwasena vikoojana	X	X	X	X	✓	X	X	X	X	X
43.	Taalu shosha	X	X	X	X	✓	X	X	X	X	X
44.	Shyaava netra	X	X	X	X	✓	X	X	X	X	X
45.	Varna bheda	X	X	X	X	✓	X	X	X	X	X
46.	Visheshadrikta koshtashca kasate	X	X	X	X	✓	X	X	X	X	X

Samprapti

Samprapti helps us to understand how the disease has manifested after nidana sevana.

Samanya Samprapti of kasa

Acharya Charaka explained samanya samprapti of kasa as vitiated prana and udana vayu, attains upward movement and gets filled up in the channels, which are

present in the shira, ura and greeva pradesha. Vitiating of prana & udana vayu and blocking of srotasas results in increased pressure inside the channels of eyes, nose, ear and throat. In turn there will be severe painful contraction of muscles in the areas like mandibular joint and cervical region, resulting in forceful expulsion of air producing a

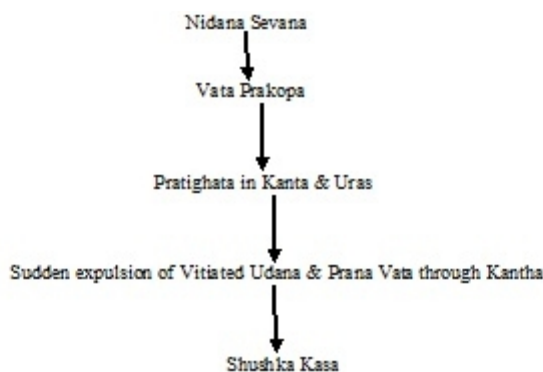
typical sound in the presence or absence of sputum called as kasa.

Acharya Sushruta narrates sampraapti of kasa as by the nidana sevana, vitiation of prana vayu takes place and this gets mixed with udana vayu, and further moves upwards. The prakopa of these two vayus causes abnormal, forceful expulsion of vayu from the mouth creating a peculiar sound similar to that of sound produced by broken bronze vessel.

Vagbhata also opined the same view. There is no clear explanation of sampraapti of the disease Vataja Kasa

except from some of the Aachaaryaas like Bhela. But the description regarding the general sampraapti of Kasa explained in our classics can be taken to understand the sampraapti of Vataja Kasa.

The sampraapti of Vataja Kasa explained by Aachaarya Bhela tells that, due to nidaana sevana, vitiation of Vata takes place and moves to the Hrudaya. In Hrudaya, it creates hrudgraha and reaches oordhwa dhamanees thereby produces Vataja Kasa.¹³



Upashaya of Vataja Kasa

Food having snigdha, amla, lavana, ushna and vatahara aahaaraas are considered as upashaya of Vataja Kasa.

Anupashaya of Vataja Kasa

Ruksha, sheeta, kashaaya dravya sevana, alpa bhojana, pramitha bhojana and vegadhaarana all act as anupashaya.

Saadhyaasaadhyatha

According to Charaka and Vaagbhata the Kasa, which is manifested by a single dosha is saadhya. So, Vataja Kasa is saadhya to treat.

Vataja Kasa will be saadhya for chikitsaa if it is;

- Navotpanna.
- Upadrava rahita
- All the chikitsaa chatushpaadaas are in proper condition
- Manifested with alpa nidaana, poorwaroopa and roopa
- The prakruti is not of vataja
- The kaala and the desha are not similar to the vata dosha.
- In Bhaavaprakasha it is stated that all type of kasa in old age is yaapya.

Chikitsa Vivechana

Based on the rogi and roga bala the mode of treatment whether shodhana or shamana has to be decided.

The line of treatment of vataja kasa includes ¹⁴

- Sneha
- Peya
- Ksheera
- Snaihika dhooma
- Lehya
- Abhyanga
- Maamsa rasa
- Parisheka Swedana
- Basti
- Yoosha
- Virechana

- Sarpi

DISCUSSION

Derivation

Vataja kasa is a sudden, often involuntary, forceful release of air from the lungs due to the chala guna of vata. During this process child produces altered sounds from kantha and bends the body due to pain.

Paribhasha

In Kanta both reflex activities of Prana and Udana vayu, require co-ordinate action. When the reflex activity of Prana vayu is in action such as while swallowing food, initiation of the action of Udana vayu by way of talking brings a collusion between the two reflexes; and then the obstructed Prana vayu takes a deviation by imitating or following the Udana vayu in its action and comes out through oro or naso pharynx with a sound resulting in kasa.

Literary review

Nidanas of Vataja Kasa

As the pranavaha srotas is directly related with the external environment through the nose and mouth, it is more prone for allergens and droplet infections. Factors like Air pollution due to heavy traffic, dust and urbanization leads to the manifestation of Kasa. Immunity factor and Deha Prakrithi is responsible for disease manifestation, which is influenced by nidanakara factors.

Nidana is categorized broadly into two main divisions

Aharaja nidanas

Viharaja nidanas

Poorvarupa of Vataja Kasa

Shookapurna Gala, Kanta, Asya

The vitiated Vata, takes shelter in the kantha pradesha and dries up the srotases which are present in the kantha, gala and asya pradesha. Due to this, the rookshatha in these areas will be increased causing difficulty in swallowing and patient feels as if thorns are present in the throat region.

Kantha Kandu

The shoshana of kapha in kanta caused by rooksha guna of aggravated vata produces itching in the throat region. Kapha also undergoes vitiation in the tara tama bhava along with vayu and this vitiated kapha causes coating over kantha pradesha and during the movement of vayu in the kanta pradesha over kapha lipta pradesha results in kanta kandu.

Bhojyanam Avarodha

The nishwasa and annapraveshakruth are the main functions, which is performed by prana vayu. In the pathogenesis of Kasa, the Prana and udana vayu are vitiated and its normal functions are also impaired causing obstruction to the normal flow of ahara and jala.

Aruchi

In the disease kasa there is vitiation of vata initially followed by kapha dosha. The vata causes dryness of the mouth and throat region, where as the kapha dosha does the lepa over these regions causing impairment in taste perception leading aruchi.

Sashabdha Vaishmya

A change in normal voice is noticed as a result of vitiation of udana vayu which is responsible for speech production. Also it may occur due to the dryness, irritation, and itching sensation in the kanta pradesha, which in turn causes the hoarseness of voice.

Agnisada

The vitiated vata and kapha dosha results in vaishmyata of agni and becomes responsible for mandagni.

Gala Talu Lepa

The vitiated kapha does the coating in the region of kantha, gala, asya pradesha.

Roopa of vataja kasa

Shuska kasa The aggravated vata moves in the ura, kantha, gala and talu pradesha and does the shoshana of kapha which is present there leading to shushka kasa.

Prasakta Vega The increase in laghu and chala gunas of vata results in continuous cough.

Parshwa shoola, Shirashoola, Urahshoola and Hruthshoola: Shoola is the main feature of aggravated vata. The seats of prana and udana vayu are urah, hrudaya, kantha and shira regions. So due to the vimarga gamana of vata and obstructed flow, pain is seen in the above mentioned regions.

Ksheena bala and Daurbalya Anna praveshakruth is the main function of Udana vayu is lost along with the mandagni which is caused due to vitiated vata and kapha. Due to Kasa vega and reduced intake of food makes a person more tired causing decreased bala of shareera.

Snigdha, amla, lavana bhukta peetai prashamyati Snigdha, amla and lavana rasa dravyas are capable of reducing vata dosha that in turn becomes responsible for the reduction in duration and intensity of kasa

Ksheena swara Udana vayu, which is responsible for the production of normal voice, will be impaired in the disease kasa leading to the hoarseness of voice or swarabhedha.

Shushka kanta, Ura and vaktra The urdhwa gamita vayu does the shoshana of kapha dosha in those regions leading to shushka kantha, ura and vaktra.

Samprapti of vataja kasa

All most all the Acharyas have explained the samanya samprapti of kasa in detail. Acharya Bhela the only

person has explained the samprapti of vataja kasa separately.

Upashaya and Anupashaya of Vataja Kasa

Upashaya and Anupashaya are the two aspects to control and increase the condition vataja kasa respectively.

Saadhyaasaadhyatha: Vataja kasa is curable when pathya and apathya are strictly followed along with suitable medicine.

Chikitsaa Vivechana

Management of Kasa in children is not discussed in detail anywhere. Based on the rogi and roga bala the mode of treatment wheather Shodhana or Shamana in kasa has to be decided. Though Shodhana therapy is mentioned for kasa roga, it is better to implement Shamana line of management in children with kasa.

CONCLUSION

Most of the nidanas explained in Ayurvedic classics were found to act as precipitating or triggering factors in production of kasa especially Vihara sambandhi nidanas like exposure to raja, dhooma and Sheeta vayu. There was significant role of Ahara sambandhi nidana in initiation of vataja kasa in children. Nidana parivarjana has a definite role in reducing the recurrence of Vataja kasa in children. There is no specific poorvarupa told for individual type of Kasa in classics. The actual signs and symptoms of the disease will be seen in the vyakta avastha where dosha doosha sammoochana takes place. With the help of roopa, a disease can be diagnosed and confirmed. The samprapti ghatakas can be studied with the help of roopa only. The views on Samprapti explained by different acharyas are similar.

It is helpful in diagnosing the disease during doubtful situation, when physician fails to diagnose the disease, with the help of Nidana, Poorva roopa, Roopa and Samprapti. In this condition diagnosis of the case is made by upashaya and anupashaya.

Before the start of treatment physician should decide whether the patient should be included for treatment and to decide the line of treatment as well as the prognosis of the disease, sadhyasadyatha is helpful. Management of Kasa in children is not discussed in detail anywhere. Based on the rogi and roga bala the mode of treatment whether Shodhana or Shamana in kasa has to be decided

REFERENCES

1. Agnivesha, Charakasamhita (Hindi Commentary by Vidyothini), Chaukamba Bharati Academy Publication, Varanasi, Volume I, Reprint 2001. p. 713.
2. Monier Monier William, A Sanskrit English Dictionary, Motilal BanarasisPublishers Private Limited, Delhi. 5th Edition, 1997 p. 281.
3. Ganga Sahaya Pandeya, Charaka Samhita of Agnivesha, 8th ed., Varanasi, Chowkambha Samskrita Samsthan, 2004; (2): 455
4. Acharya YT, Acharya NR, Sushruta Samhita of Sushruta, 7th ed., Varanasi, Chowkambha orientalia, 2003: 766
5. Ramachandra Shastri Kinjawadekar, Ashtanga Sangraha of Vagbhata, 2nd ed., Delhi, Satguru publications, 1999: 664
6. Sadashiva Shastri, Ashtanga Hrudaya of Vagbhata, Varanasi, Chowkambha Surabharathi Prakashan, 2002: 470
7. Krishnamurthy. K.H, Bhela Samhita of Bhela, 1st ed., Varanasi, Chaukhambha Visva Bharati, 2000: 146,424,425
8. Yadunandana Upadhyaya, Madhava Nidana of Madhavakara, Varanasi, Chaukhambha Sanskrit Bhavan, 2005: 307
9. Pt. Brahma Shankara Mishra, Bhava Prakasha of Bhavamishra, Chowkambha Samskrita Samsthan, 2005: 150

10. Indradev Tripathi, Yoga Ratnakara, 1st ed., Varanasi, Krishna Das Academy, 1998: 317
11. Vaidya Shankarlalji Jain, Vangasena Mumbai, Khemraj Shri Krishna Das Prakashan, 2003: 242
12. Ganga Sahaya Pandeya, Gada Nigraha of Vaidya Sodhala, Varanasi, Chaukhambha Sanskrit Sansthan, 2005, (2): 335
13. Krishnamurthy. K.H, Bhela Samhita of Bhela, 1st ed., Varanasi, Chaukhambha Visva Bharati, 2000: 146
14. Ganga Sahaya Pandeya, Charaka Samhita of Agnivesha, 8th ed., Varanasi, Chowkambha Samskrita Samsthan, 2004, (2): 459

Abbreviations

- A.H. - Astanga Hridaya
- A.S. - Astanga Samgraha
- B.P - Bhava Prakasha
- B.S - Basavarajeeyam
- B.R.- Bhaisajya Ratnavali
- C.D - Chakra Datta
- C.S - Charaka Samhita
- Chi.- Chikitsa Sthana
- Ck - Chakrapani
- G.N - Gadaniagraha
- H.S. - Hariitha Samhita
- K.S. - Kashyapa Samhita
- M.N. - Madhava Nidana
- S.S - Sushruta Samhita
- Sh..S. - Sharangadhara Samhita
- Y.R.- Yoga Ratnakara
- V.S - Vanga sena

Source of support: Nil, Conflict of interest: None Declared