

A Conceptual Review Study of Etiopathogenesis of Kasa

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Abstract

Cough is a sudden and repetitively occurring protective reflex, which helps clear the large breathing passages from fluids, irritants, foreign particles and microbes. It can be correlated with kasa as per Ayurveda. Normally kasa acts as defence mechanism for the airways and the lungs; however, in some conditions, it may become excessive and potentially harmful to the air mucosa. It is the most common presenting complaint. Pranavaha srotas dushti is among the most important human health problem because of their high incidence. Hetus are factors responsible for formation and pathogenesis of disease. It helps in the complete establishment of disease. Acharya Sushruta has mentioned Nidan parivarjan can reverse the pathogenesis. So present study is an attempt to review conceptually the etiopathogenesis of kasa.

Keywords: Cough, Kasa, Hetu, Pranavaha

Introduction:

Ayurveda Shastra aims at keeping a healthy person healthy and managing or curing diseases (mind, body or both) that manifest in a person. Brihatrayee are the most ancient, encyclopedic and authoritative classical books of Indian Medicine. These books included in the list of few books that have lived a life of about two millenniums. They survival for such a long period becomes quite conspicuously surprising when our day to day experience is that in our modern library of hundreds of thousands of volumes, a book is hardly extant for a period of even half a century.

Now a days due to modern life style many changes in habits such as fast food, smoking,

alcoholism and improper working condition, lack of exercise and also increasing pollution leads to many Diseases. Among those disease. Kasa is one of the major Health issue. The prevalence of cough is 9.6 %.¹ Due to Hetusevan, Prana and Udana vata getting aggravated come out of the mouth accompanied with loud sound like that of broken bronze (bell) and dosas also; this leads to Kasa Vyadhi.

The acknowledgement of any disease can be gain by Nidan- Panchak i.e. Nidana, Purvarupa, Rupa, Upshaya, Samprapti.² First type of Nidan- Panchak is Nidan means cause or Hetu.² The Etiological factors (Hetu) is most important in the pathogenesis of disease. The factor which is the main cause to produce a disease is Hetu, called as Nidan. This helps to establish the whole samprapti till the clearance of disease. Acharya Charak included that use Of Hetuviparit-Chikitsa will help

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to cure disease and also Swasthya Rakshana.³ And Acharya Sushrut has mentioned that the simple baseline treatment is “Nidan Parivarjan”.⁴ Hence the knowledge about the hetu is guide for treatment and also avoidance of disease.

Aim

To study conceptually etiopathogenesis of kasa.

Objective:

1. To take various references related to Kasa in various Ayurvedic Samhitas.
2. To study detailed samprapti of kasa.

Material and Methods:

Literature review is done through all available Ayurvedic Samhitas, texts, various research papers available in Journals and online data available.

Review of Literature:

Nidana of kasa:

Pranavaha Srotas is a system which maintains a continuous direct contact with external

environment from the first to last minute of life. Thus it is more prone to allergies and infections. Nidanas explained in classics can be categorized broadly into two groups⁵, namely

- Samanya Nidana
- Vishesha Nidana

1. Samanya Nidana:

Samanya nidanas⁶ can be further classified as follows⁷.

- Aharaja Nidanas
- Vimargagamana of Bhojana
- Rookshanna
- Viharaja Nidanas
- Kshavathu Vegadharana
- Dhoomopaghata
- Raja
- Ati Vyayama
- Manasika Nidanas
- Vyadhijanya Nidanas
- Pratishyaya

Vishesha Nidana:

These are the specific causative factors responsible for the production of individual varieties of Kasa

Nidana of Vataja Kasa

Sr No	Nidana	C.S	S.S	A.H
	Aharaja			
1	Rooksha Ahara Sevana	+	+	+
2	Ati Kashayarasa Ahara Sevana	+	+	-
3	Sheeta Ahara Sevana	+	+	-
4	Visham Ahara Sevana	-	+	-
5	Alpa Ahara Sevana	+	-	-
6	Bhojanasya Vimargagamana	-	+	-

	Other			
7	Dhoomopaghata	-	+	-
8	Rajasevana	-	+	-
	Vihar			
9	Shrama	+	+	+
10	Vegavarodha	+	+	+
11	Hasyapraharshya	-	-	-
12	Anila Sannirodha	-	-	-
13	Vega Udeerana	-	-	+
14	Ratri Jagarana	-	-	+
15	Kshavathu Dharana	-	+	-

Nidana of Pittaja Kasa

Sr No	Nidana	C.S	S.S	A.H
	Aharaja			
1	Katu Ahara Sevana	+	-	-
2	Amla Ahara Sevana	+	-	-
3	Ushna Ahara Sevana	+	-	-
4	Vidhahi AharaSevana	+	-	-
5	Kshara Sevana	+	-	-
6	Tila, Lashuna, Kulatha Sevana	-	-	-
Manasika				
7	Krodha	+	-	-
8	Santapa	+	-	-

Nidana of Kaphaja Kasa

Sr No	Nidana	C.S	S.S	A.H
	Aharaja			
1	Guru Ahara	+	-	-
2	Abhishyandi Ahara Sevana	+	-	-
3	Madhura Ahara Sevana	+	-	-
4	Snigdha Ahara Sevana	+	-	-
5	Pichchhila Ahara Sevana	+	-	-
6	Dadhi Sevana	+	-	-
7	Guda Vikara Sevana	+	-	-
Viharaja				
8	Hima (Ambu) Snana	+	-	-
9	Divaswapana	+	-	-

Samprapti:

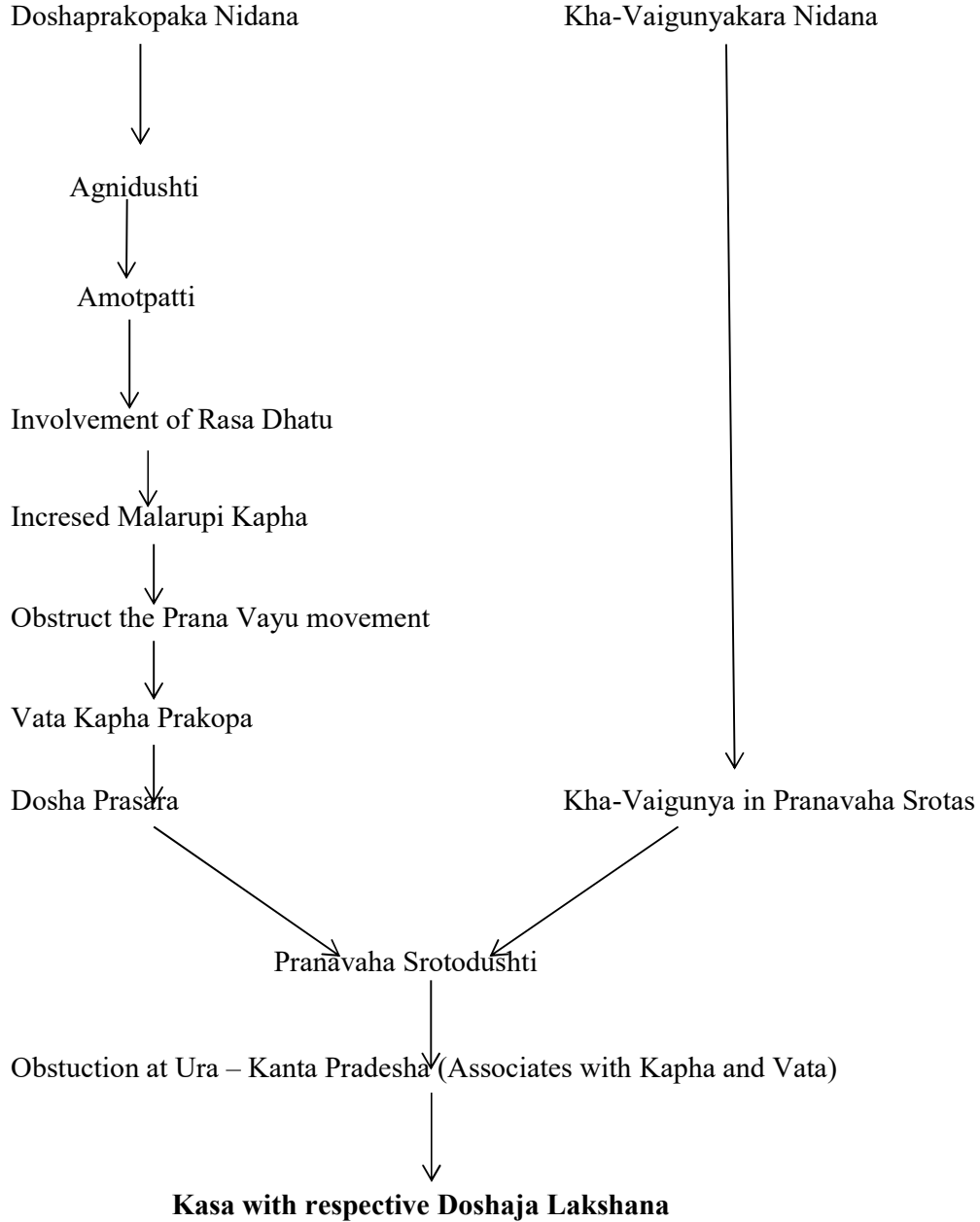
Samprapti is the process of manifestation of a disease beginning from initial phase of Doshic vitiation⁸. It deals with all the pathological processes, which are responsible for clinical signs and symptoms of the disease. Ayurveda considers Samprapati Vighatana (splitting or disintegration of Samprapti / reversal of pathogenesis) as the treatment⁹. Thus precise understanding of Samprapti is of utmost importance.

Samanya Samprapti of Kasa:

Acharya Charaka clearly explained the Samprapti of Kasa –as downward movement

of Pranavayu is obstructed it attains the upward movement along with Udanavayu. Obstruction at chest and neck region forces them to get filled up in the channels of head and neck. Then sudden extension/ jerky movement in the areas of Hanu (temporomandibular joint), Manya (neck), eyes and the whole body followed by severe contraction of thoracic cage and eyes leading to tremendous increase in intra-thoracic pressure, all directed towards glottis. Then sudden opening of glottis resulting in forceful expulsion of air producing a typical sound with the presence or absence of sputum called as Kasa¹⁰.

The flow chart below gives a brief depiction of Samprapti of Kasa.



Acharya Sushruta’s explanation also goes in same line with describing the sound produced as similar to that of sound produced by broken bronze vessel¹¹.

Vagbhata’s description includes the both above explanations¹². In AshtangaSangraha it is clearly described

that Apana Vayu is obstructed and it attains upward movement. In the rasa Sthana i.e. Urdhva Amashaya and Ura it is again obstructed by Udana Vayu and both attain Prokopavastha and together move towards Kantha. The later part of the Samprapti is at par with Acharya Charaka’s explanations¹³.

Poorvaroopas:

Poorvaroopas are those signs and symptoms which appear prior to the manifestation of actual disease. They appear during Sthana Samshraya, the stage of localization at the site of Khavaigunya¹⁴ and considered as the first indicators of future disease.

There is much similarity among the Poorvaroopas of Kasa explained in the classics of Ayurveda. Those are as follows

1. Shooka Poorna Galaasyata
2. Kanthe Kandu
3. Bhojyanaam Avarodha
4. Aruchi
5. Sashabdha Vaishamya
6. Agnisada
7. Gala Lepa
8. Thalu Lepa.

Hridaya Aswastha has been mentioned as Poorva roopa of Kasa by Vagbhata in Astanga Sangraha.

Poorvaroopas of Kasa

Sr No	Poorvarupa	C.S	S.S	A.H
1	Shooka Poorna Gala	+	-	+
2	Shooka Poornaasya	+	-	-
3	Kanthe Kandu	+	+	+
4	Bhojyanam Avarodha	+	+	-
5	Arochaka	-	+	+
6	Sashabdha	-	+	-
7	Vaishamya	-	+	-
8	Agnisaada	-	+	-
9	Gala Lepa	-	+	-
10	Talu Lepa	-	+	-
12	Hridaya Aswasthata	-	-	-
13	Kavala Galane Vyadha	-	-	-

The actual signs and symptoms of fully evolved disease along with the cardinal features will be seen in Vyakta Avastha where Dosh-Doshya Sammoorchana takes place. With the help of Roopa, a disease can be diagnosed with confirmation and management can be planned accordingly. Roopa is of two types, namely

Samanya Roopas of the disease Kasa –

- Samanya Roopa
- Vishishta Roopa

The signs and symptoms of the disease irrespective of Doshic predominance will be explained under Samanya Roopa, which includes cardinal signs and symptoms of the disease upon which the disease Kasa is diagnosed.

➤ Kasana / Kasa (forceful expulsion of

- Vayu with typical sound as explained earlier)
- Dehakshepa (jerky movement of body parts)
 - Prishtha, Ura and Parshwa Sthambha

(feeling of tightness)

The signs and symptoms of the disease which represent a particular Doshic involvement are Vishishtha Roopas of the disease/subtypes of the diseases

Roopa of Vataja Kasa in different classics

Sr no	Roopa	C.S	S.S	A.H
1	Shushka Kasa	+	+	+
2	Prasakta Vega	+	+	+
3	Shira Shoola	+	+	+
4	Hrit Shoola	+	+	-
5	Parshwa Shoola	+	+	-
6	Urah Shoola	+	+	+
7	Kantha Shoola	-	-	-
8	Ksheena Oja	-	+	-
9	Ksheena Bala	-	+	+
10	Ksheena Swara	-	+	-
11	Swara Bheda	+	+	-
12	Shushka Urah	+	+	-
13	Shushka Vaktra	-	+	-
14	Shushka Kantha	+	-	-
15	Snigdha, Amla, Lavana Bhukta Peetai Prashamyati	+	-	-
16	Moha	+	-	-
17	Kshobha	+	-	-
18	Anga Harsha	+	-	-
19	Dourbalya	+	-	-
20	Ruja	+	-	-
21	Paravata	-	-	-
22	Shankashoola	-	+	-

Roopa of Pittaja Kasa in different classics

Sr no	Roopa	C.S	S.S	A.H
1	Peeta Nishteevana and Peeta Netra	+	+	+
2	Tikta Asyata	+	+	+
3	Urodoomayana	+	-	+
4	Trishna	+	+	+
5	Daha	+	+	+
6	Moha	+	-	+
7	Aruchi	+	+	+
8	Bhrama	+	-	+
9	Pratata Kasa	+	-	+
10	Shleshmana Pitta Samsrustam	+	-	+
11	Gruhitwa Hridyam	-	-	-
12	Jwara	-	+	-
13	Pandu Varna Shareera	-	+	-
14	Pitta & Rakta Vamana	-	+	-
15	Mukha Shosha	-	-	-

Roopa of Kaphaja Kasa from different classics

Sr no	Lakshanas	C.S	S.S	A.H
1	Bahula, Madhura, Snigdha, Ghana, Sandra Kapha	+	-	+
2	Urasya Alpa Rujatwa	-	+	-
3	Hridaya Stimitha	-	-	-
4	Kapha Sampurnamiva Vaksha	+	-	+
5	Kanthe Kandu	-	-	-
6	Swara Bheda	-	-	-
7	Peenasa	+	-	+
8	Utklesha	+	-	+
9	Chhardi	+	-	+
10	Aruchi	+	+	+
11	Asya Madhuryata	+	-	+
12	Shira Shoola	-	+	-
13	Mandagni	+	-	+
14	Gourava	+	-	+

Upashaya and Anupashaya:

It is the medicine, food or regimen which gives relief in the signs and symptoms of the disease. During doubtful situations when physician fails to diagnose the disease, with the help of Nidana, Poorvarooopa, Rooopa and Samprapti; Upashaya and Anupashaya are helpful in diagnosing the disease. Upashaya for a disease is considered to be Satmya for that disease and should be practiced by the patient. Anupashaya is Asatmya (harmful) for the disease and patient has to avoid those.

Exact Upashaya and Anupashayas are not told in the context of Kasa. It can be understood that Rooksha, Sheeta and Laghu Ahara, Vihara and Aushadha will be Anupashaya and opposite (Snigdha, Ushna and Guru) will be Upashaya for Vataja Kasa. Snigdha, Ushana and Laghu Ahara, Vihara and Aushadha will be

Anupashaya and opposite (Rooksha, Sheeta and Guru) will be Upashaya for Pittaja Kasa. Snigdha, Sheeta and Guru Ahara, Vihara and Aushadha will be Anupashaya and opposite (Rooksha, Ushna and Laghu) will be Upashaya for Kaphaja Kasa.

Upadrava:

Any disease if neglected, improperly or incompletely treated or if patient continues to indulge in unwholesome diet and behavior, can lead to secondary disease known as Upadrava i.e. the complication of the disease.

Charaka in the context of Nidanarthakara Roga tells, untreated or partially treated Kasa will land up in Kshaya. In Astanga Hridaya and as well as in Yogaratnakara, it is mentioned that if

Kasa is neglected then it leads to Swasa, Kshaya, Chardi and Swarabheda. In Bhavaprakasha, it is explained that, if the Kasa is neglected without proper treatment, it can lead to Upadravas like Jwara, Arochaka, Swasa, Swarabheda and Kshaya. In Astanga Sangraha it is described that on long run Kasa leads to Varna, Oja, Bala and Mamsa Kshaya.

Discussion and Conclusion:

Kasa is most troublesome disease. It affects the working ability of an individual. To prevent this, we must first acknowledge the etiological factors and its pathogenesis. Because by curbing its pathogenesis, we can prevent the formation of disease or reverse its direction to normalcy.

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