



Case Study

AYURVEDIC MANAGEMENT OF VATIK KASA IN ERA OF COVID 19- A CASE SERIES

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ABSTRACT

Majority of the patients having cough (*Kasa*) is the presentation of respiratory disease. In general, air pollution; smoking and improper food habits are the triggering factors, which enhance this disease. Since the time 2nd wave of COVID-19 has gone the patients these days are coming with the major complaints of severe itching in the throat along with dry cough. *Kasa* is *Kapha-Vata* dominant disorder having 5 types, among which the pattern of cough relates to most of the symptoms of *Vatik Kasa*. The drugs like *Vasavaleha* and *Chandramruta rasa* helps to alleviate the vitiated *Kapha Vata Dosha* along with *Haritaki* as *Anulomna* and *Abhyanga* with *Sarshapa taila* mixed with *Saindhava lavan*, and *Vashpa swedana* on *Uraha Pradesh*. The major symptoms of *Vatika Kasa* subsided within 3 days and rest of the symptoms got cured in 10 days. Aim: Management of *Vatik Kasa* by Ayurvedic treatment modalities. Methodology: The study was conducted on three patients having symptoms of *Vatik Kasa*. In this case series, 3 patients were treated with local *Abhyanga* and *Swedana*, *Haritiki*, *Vasavaleha* and *Chandramruta rasa* and for 10 days. Conclusion: The use of *Vasavaleha* and *Chandramruta rasa Muhurmuha* along with local *Abhyanga* and *Swedana* showed significant improvement in the symptoms of the patients. Improvement was quite quick and highly significant on the symptoms of *Vatika Kasa*.

INTRODUCTION

*Kasa* is a disease mentioned in Ayurveda that involves most of the presentations of a respiratory tract disease. For normal functioning of *Pranavaha Srotas*, *Prana* and *Udana Vayu* are responsible. In the pathogenesis of disease *Kasa*, vitiated *Kapha* obstructs the free flow of *Prana Vayu* in *Kantha* and *Ura*. In *Kasa roga*, vitiated *Prana Vayu* along with *Udana vayu* produces sounds that resembles with broken pieces of bronze on striking.<sup>[1]</sup> *Kasa* is an independent disease and a symptom of many diseases. Acharya Charak has mentioned 5 types of *Kasa* viz., *Vataja*, *Pittaja*, *Kaphaja*, *Kshataja* and *Kshayaja*.<sup>[2]</sup> The prodromal symptoms of *Kasa* are feeling of spicules present in throat and mouth, itching in throat and obstruction to passage of food.

The triggering factors of *Kasa* are exposure to dust, smoke, strenuous exercise, excessive dry food intake, entry of food particles into respiratory tract, forcibly controlling natural urges like coughing, sneezing.<sup>[3]</sup>

Since the time 2<sup>nd</sup> wave of COVID- 19 has gone patients of cough are coming to O.P.D with the major complaints of headache, severe itching in the throat along with dry cough. Repeated episodes of coughing especially after exposure to cold air leads to the severe pain in ribs. The pattern of cough reported by patients after COVID-19 almost relates to most of the symptoms of *Vatik Kasa*. As mentioned by Acharya Charka the main symptoms of *Vatika Kasa* are *Shushkakasa* (dry cough), *Parshawashoola* (pain in sides of chest), *Shirashoola* (headache), *Swarbheda* (hoarseness of voice), *Shushka kantha vaktra* (dryness in throat and mouth).<sup>[4]</sup>

As *Kasa* is *Nidanarthakara Vyadhi* i.e., causative factor for other diseases and *Vatik Kasa* remains for longer duration can produce dreadful conditions like *Kshaya*.<sup>[5]</sup> So it is important to treat this disease at its earliest.

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As mentioned by *Acharya Charka* in *Chikitsa Sutra* of *Vatika Kasa* that 1<sup>st</sup> *Snehana* should be done. For that *Abhayanga* (local) can be done and *Avleha* can also be given. After the process of *Snehana* gets completed *Swedana* should be done. In case *Pitta* or *Kapha dosha* are associated with *Vataj Kasa Sneh Virechana* can also be given.<sup>[6]</sup>

Keeping in mind the *Chikitsa Sutra* of *Vatik Kasa* as mentioned by *Acharya Charak* local *Abhayang of Uraha Pradesh* with *Sharshap Taila* mixed with *Saindhava lavan* followed by *Swedana* helps in pacifying the *Vata* due to *Ushna Guna*. *Acharya Vrundhamadhava* has mentioned *Vasa* as the choice of drug for *Kasa roga*. The main ingredient of *Vasavaleha* is *Vasa* along with *Pippali* and *Ghrita* and is advised to take along with *Madhu*<sup>[7]</sup>. As all these ingredients possess *Vatahara* and *Kaphahara* properties, and it becomes the potent medication to pacify the symptoms of *Vatik Kasa*. Also *Chandramruta rasa* is quite potent drug which possess the qualities to pacify the symptoms of *Vatik Kasa*.<sup>[8]</sup>

### Case Series

This case series included the patients of *Vatika Kasa* who visited the Govt. Ayurvedic Dispensary Basolhi Town of District Kathua, J&K. Demographic data of the patients included their age, gender, occupational history and personal history. Patients were examined physically and required investigations were carried out. 1<sup>st</sup> follow-up and assessment was done on 4<sup>th</sup> day and 2<sup>nd</sup> follow-up and assessment was done after completion of treatment of 10 days. All the medication provided to the patients especially for internal use was of the Govt supply that has been provided by the Department of Ayush to Govt. Ayurvedic Dispensary Basolhi Town. So the present attempt was initiated to see the efficacy of Ayurvedic management of *Vatik Kasa* in era of COVID 19.

### Case Presentation

#### Case 1

A male patient aged 45 years visited OPD with complaints of dry cough, throat irritation, severe itching in ears, difficulty in deglutition and constipation since a week. Due to excessive cough, patient had disturbed sleep, as the mild pain in flanks while coughing, weakness and hoarseness of voice. The episode of cough increased at night and after exposure to cold air. No history of fever, running nose, difficulty in breathing, and any other major systemic illness on examination was found, no history of allergy reported. On examination, blood pressure, temperature, pulse rate were normal, no pedal edema was there. Cough was without expectoration and mucous.

*Prakruti* was *Vata Pittaja*, no any family history of tuberculosis, extrinsic asthma and allergy. The occupation of the patient was Govt. employee. Patient had no history of smoking.

On chest examination, air entry on both sides was found normal and no wheezing and rhonchi was found. Per abdomen examination, non tender and hard. Mild pain was present in the right iliac fossa (due to stress due to coughing). On CVS examination, S1 and S2 were normal, and no murmur was heard. On CNS examination, patient was conscious and oriented. On throat examination, redness was observed at the soft palate. No swelling on larynx, and tonsils was observed.

#### Case 2

A middle aged female patient of 42 years came to OPD with symptoms of dry cough, throat irritation, severe itching in ears, headache and general weakness since 1 day. She complained of repeated episode of cough during day that increased more at night. Patient had visited previously for the treatment of fever before 6 months with same complaints, and got relieved. On enquiring, it was found that there was no history of dyspnoea, breathlessness, no history of tuberculosis, bronchitis and diabetes mellitus and hypertension. Menstrual history was normal but occasionally patient was dysmenorrhagic. There was history of LSCS before 5 years, having one male child, pulse was regular and afebrile. Urine and stool were normal. No pedal oedema and cyanosis was observed. Tongue was coated. Patient was of *Alpasatva*, *Prakruti* of patient was *Vata Pittaja* and *Akruti* was *Madhyama*.

There was no family history of diabetes mellitus and hypertension. Patient was losing weight, so AFB sputum test was advised to rule out possibility of tuberculosis, but it was found negative. On examining the chest, air entry (AE) was found reduced on right side (RS). No adventitious sounds were heard. Patient was advised to take X-Ray of chest in AP and lateral view along with WBC, AEC, but all the investigations were within normal limit. As the patient was house wife by occupation, *Vataj kasa* was diagnosed as per Ayurvedic etiology.

#### Case 3

A male patient of 28 years came to OPD with complaints of coughing, irritation in throat and dryness of mouth since 2 days. *Parshavashoola*, *Hritashoola*, *Shirashool* were also another complaints as this patient also had repeated episode of cough during day as well as night. *Prakruti* was *Vata kaphaja*, no family history of tuberculosis, extrinsic asthma and allergy. Patient was in government service. On examination, no other major findings were observed.

Table 1: Treatment Protocol

Drugs	Dosage	For 1st 3 days <i>Kala and Anupana</i>	Dosage	4 <sup>th</sup> to 10 <sup>th</sup> day <i>Kala and Anupana</i>
<i>Abhyanga (sarshapa taila with Saindhava Lavana)</i>	Q.S	Early morning empty stomach	Q.S	Early morning empty stomach
<i>Vashpa swedana</i>		Early morning empty stomach		Early morning empty stomach
<i>Haritaki churna</i>	5 gm	Early morning empty stomach evening 6 pm with <i>Ushodak</i>	5 gm	Early morning empty stomach evening 6 pm with <i>Ushodak</i>
<i>Vasavaleha</i>	5 gm	Every 2 hour with <i>Ushanodak</i>	5 gm	1 hour before meal 3 times a day <i>Ushanodak</i>
<i>Chandramruta rasa</i>	2 tab (250mg)	Every 2 hour with <i>Adrak swaras</i>	2 tab (250 mg)	1 hour before meal 3 times a day <i>Adrak swaras</i>

Table 2: Pathya-Apathya

<i>Pathya Ahahar</i>	<i>Apathya Ahahar</i>
<i>Ushanodak</i> (reduce upto 1/4 <sup>th</sup> )	Avoid <i>Pisht anna</i>
<i>Mudag yush, Masoor yush, Shali Chaval.</i>	Excessive <i>Lavan</i> and <i>Katu ras</i>
<i>Dudhi, Karvelak, Patol, Kushmand</i>	Dairy products.
	Junk food
<i>Pathya Vihar</i>	<i>Apathya Vihar</i>
<i>Nirvata sthana shayanarth</i>	<i>Divaswapan, Ratrijagran</i>
Patients were advised to cover the head and ears while going out.	<i>Pravatsevan, Chinta adhikya.</i>
	<i>Vyayam</i>

## Assessment

Laboratory investigations of the patients have been mentioned in table 3 and vitals of the patients i.e., Peak Expiratory Flow Rate (PEFR), Breath Holding Time (BHT), Blood Pressure (BP), Respiratory Rate (RR) and Pulse Rate (PR) have been mentioned in table 4.

Score assessment tables of *Vatika Kasa* and frequency of cough have been mentioned in table 5. Results of this scoring assessment have been mentioned in table 6 and table 7.

## Observations

It has been observed that after COVID-19 spread, patients who visited OPD come with complaint of dry coughing rather than productive coughing these days. Though the patients presented in this case series were not affected with COVID -19. This issue of specific coughing pattern of patients has to be explored more in the coming days yet.

First patient was Govt. employee by profession in water supply department. He was doing night duties. It may be possible that pollen grain allergy and exposure to cold might be the triggering factors for *Kasa*, because in Ayurveda, exposure to cold wind, food and environment aggravates *Vatadosha* and hence causes *Vatik Kasa*. Within 3 days, patient felt relief in throat irritation, by this time he found no difficulty in

deglutition. Now he felt soothing effect in throat, and coughing was relieved within 10 days. His eosinophil count and ESR were also decreased, showing good response in fighting allergens. Sleep was better and not disturbed due to coughing. Constipation was also relieved with medication due to *Anulomana* action of *Haritaki*. For the management of *Kasa*, *Vatanulomana* drug does wonders along with *Vatahara* and *Kaphahara* drugs.

Second patient was house wife of *Alpa Satva*. She was counseled first and given the medication. By the end of 3<sup>rd</sup> day, she felt energetic than before, her weakness decreases with medication due to *Balya* and *Rasayana* effect of the ingredients. As patient comes with burning micturition, *Chandramruta rasa* helps to relieve *Daha* and burning micturition. Her symptoms were relieved after 10 days and she was advised to continue *Pathya ahara* and *Vihara*. When she came for follow up, her complaints were relieved.

Third patient was government servant in police department so patient got subsequent relief, at the time of follow up patient's complaints were less. *Parshavashoola* and *Hritashoola* was reduced.

It was observed that internal medication given *Muhura muhura* every 2 hours along with strict *Pathya Palan*, all the three patients got results within 3 days of

time. Patient's itching in the throat was reduced and repeated episode of cough also reduced and sleep was sound after medication intake. They felt warmth during medication intake, might be due to *Ushna* property of ingredients and also due to *Pathya palana*.

Reduction in increased eosinophil count and ESR, denotes good response in fighting allergens; increase in breath holding time and respiratory rate coming to normal rate shows improvement in signs and symptoms of *Vatik Kasa*.

Patients were called upon on 4<sup>th</sup> day for follow up to see improvement in condition. It was observed that even on the third day, the major complaints of the patients subsided. Patients were advised to continue the medication as per protocol (as mentioned in table 1) after three days upto 10 days along with *Pathya palana*. The results were quite immediate with Ayurvedic medication oral intake and with local *Abhyanga* and *Swedana* along with proper *Pathya ahar vihar palana*. All the three patients had marked improvement in symptoms of *Vatik kasa*.

**Table 3: Laboratory Investigations of the Patients**

Investigations	Before treatment	After treatment	Before treatment	After treatment	Before treatment	After treatment
	Patient 1	Patient 1	Patient 2	Patient 2	Patient 3	Patient 3
TLC (cu mm)	11700	11000	9400	7400	9500	10000
Neutrophils (%)	67	70	63	70	75	72
Lymphocytes (%)	24	25	27	22	21	24
Eosinophils (%)	4	3	1	1	2	1
Monocytes (%)	4	5	2	2	2	3
Hb (gm%)	13.1	13.4	11.4	11.5	14	15.2
ESR (mm/hr)	106	60	22	30	22	24
AEC (L)	450	350	50	100	300	150
FBS (mg/dl)	93	96	112	107	108	104
SGOT (IU/L)	17	24	22	20	27	30
SGPT(IU/L)	18	20	12	17	17	20

**Table 4: Vitals of the Patients**

parameters	Before treatment	After treatment	Before treatment	After treatment	Before treatment	After treatment
	Patient 1	Patient 1	Patient 2	Patient 2	Patient 3	Patient 3
PEFR	210	380	250	300	300	400
BHT	18	26	14	22	20	35
BP	128/84	120/82	100/70	116/78	130/90	120/84
RR	22	18	20	18	19	18
Pulse rate	78	76	80	82	75	80

**Table 5: Assessment of parameter of frequency of *Vatika kasa***

Signs / Symptoms	Severity	Scoring
<i>Shushkakasa</i> (dry cough)	Absent	0
	Minute quantity of sputum expectorated at the end of a bout	1
	No sputum expectorated at all	2
	No sputum expectorated, with dryness of mouth, throat and chest	3
<i>Parshawashoola</i> (pain in sides of chest)	No sputum expectorated with <i>Parshavashoola</i> , <i>Hritshoola</i> and <i>Urashoola</i>	4
	Absent	0
	Pain at the end of a bout	1

	Pain during each act of coughing	2
	Pain present irrespective of cough	3
<i>Shirashoola</i> (headache)	Absent	0
	Pain at the end of a bout	1
	Pain during each act of coughing	2
	Pain present irrespective of cough	3
<i>Swarbheda</i> (hoarseness of voice)	Absent	0
	Present	1
<i>Shushka kantha vaktra</i> (dryness in throat and mouth)	Absent, no dryness	0
	Mild thirst	1
	Thirst can be controlled	2
	Thirst cannot be controlled	3
<i>Daurbalya</i> (weakness)	Absent	0
	Able to do work with tiredness	1
	Not able to do routine work	2
	Not able to do routine work, with giddiness or fainting episodes	3
Frequency -Bouts of cough	5 no. of bout of cough/hour	0
	10 no. of bout of cough/hour	1
	15 no. of bout of cough/hour	2
	20 no. of bout of cough/hour	3
	More than 20 no. of bout of cough/hour	4

**Table 6: Results of Assessment of Vatik kasa on 4<sup>th</sup> day of Treatment**

	Symptom	<i>Shushka kasa</i>	<i>Parshva shoola</i>	<i>Shira shoola</i>	<i>Swar bheda</i>	<i>Shushka, Kantha vaktra</i>	<i>Daurbalya</i>	Frequency
Patient 1	BT	4	3	0	1	2	1	4
	AT	2	1	0	0	1	0	2
	Diff %	50	33.33	0	100	50	100	50
Patient 2	BT	4	1	2	1	3	2	4
	AT	1	0	1	0	2	1	1
	Diff %	75	100	50	100	33.33	50	75
Patient 3	BT	4	3	2	1	2	1	4
	AT	0	1	1	1	1	0	0
	Diff %	100	66.66	50	0	50	100	100

\*BT: Before treatment, AT: After treatment, Diff %: Difference in %

**Table 7: Results of Assessment of Vatik Kasa After 10 days of Treatment**

	Symptom	<i>Shushka kasa</i>	<i>Parshva shoola</i>	<i>Shira shoola</i>	<i>Swar bheda</i>	<i>Shushka, kantha vaktra</i>	<i>Daurbalya</i>	Frequency
Patient 1	BT	4	3	0	1	2	1	4
	AT	0	1	0	0	0	0	0
	Diff %	100	66.66	0	100	100	100	100

Patient 2	BT	4	1	2	1	3	2	4
	AT	0	0	0	0	1	1	0
	Diff %	100	100	100	100	66.66	50	100
Patient 3	BT	4	3	2	1	2	1	4
	AT	0	0	0	0	0	0	0
	Diff %	100	100	100	100	100	100	100

\*BT: Before treatment, AT: After treatment, Diff %: Difference in %

## DISCUSSION

*Kasa* is the disease of *Pranavaha Srotas*. It may develop as an independent disease, as a symptom or as complication of other diseases. Ayurveda has described many herbal and herbomineral formulations for management of *Kasa* along with *Pathya Ahara* and *Vihara*.

*Kasa* is the debilitating disease of *Pranavaha Srotas*, when left untreated, it may lead to dreadful diseases like *Shwasa*, *Shosha*, *Rajyakshma*, *Urakshata* and *Raktapitta*. *Kasa roga* affects the *Pranavaha Srotas*, so it has to be treated at its earliest. Because if left untreated, it may lead to further complications and affects the daily activities of a person.

Respiratory tract infections are most common infection and the recurrent *Kasa* is considered as the indicator of decreased *Vyadhikshamatva* (immunity against specific disease) or *Bala* (strength) or *Ojas* (essence of *Dhatu*).<sup>[9]</sup>

As mentioned by Acharya Charaka in *Chikitsa Sutra* of *Vatika Kasa* that 1<sup>st</sup> *Snehana* (*Abhayanga*) followed by *Swedana* should be done.<sup>[10]</sup> *Vayu* dominates the *Sparshan inderiya* and its site is *Twak*. *Virya* of the *Taila* used for *Abhayang* enters into the body after undergoing *Paka* with *Bharajak Pitta* in *Twak* and produces desired therapeutic action.<sup>[11]</sup> *Abhayang* of *Uraha Pradesh* with *Sharshap Taila* mixed with *Saindhava lavan* helps in pacifying the *Vata*. *Sarshap Taila* has *Katu*, *Tikta rasa*, *Snigdha*, *Tikshana laghu guna*, *Ushna Veerya*, when mixed with *Saindhava lavan* and applied locally the penetration of *Taila* through skin increases and *Snehan* followed by *Swedana* helps in liquification of *Doshas* and causes *Mriduta* of the *Pranavaha Srotas* that leads to pacification of *Vata*.<sup>[12]</sup>

*Acharya Sharanghdar* has mentioned *Haritki* as *Anulomana aushadhi*. It 1<sup>st</sup> does *Paka* of the *Doshas* after that eliminates them from the body. In case of *Vatik Kasa* since *Vayu* gets *Pratiloma* so *Haritiki* was given to the patients for *Anuloman* purpose.<sup>[13]</sup>

*Vasavaleha* is advised in respiratory diseases; it pacifies disease by *Vata- Kaphaghna* property. Therapeutic uses of *Vasavaleha* are *Kasa* (cough), *Shvasa*, *Jvara*, *Raktapitta*, *Rajyakshma*, *Parshva shula*, *hritshula*.<sup>[14]</sup> *Sukshma* and *Tikshana guna* of *Vasa* (*Adhatoda vasica* Nees.), *Pippali* (*Piper longum* Linn.)

and *Madhu* (honey) help in *Kaphanihsarana* and remove *Upalepa* of *Kapha* in *Kantha* (throat) and *Ura* (chest). *Vatahara* drugs such as *Sita*, *Go-Ghrita* (cow ghee) and *Pippali* cause *Vatanulomana* and pacifies *Vimarga Kupita Vata* caused due to *Vimargagami Prana* and *Apana Vayu*. *Go-Ghrita* and *Pippali* also act on *Pitta Sthana* improving the function of *Agni* thus normalizing *Vatakarma*. This process sets right the digestion, assimilation, and metabolism. Further, *Go-Ghrita*<sup>[15]</sup> and *Pippali* help in improving immunity of the body with their *Rasayana* (rejuvenative) effect, thus preventing the recurrences of symptoms. *Vasicine* and *vasicinone*, the bitter alkaloids of the *Vasa* plant, possess broncho-dilatory effect.<sup>[16]</sup>

*Chandramrita rasa* is a herbomineral formulation. Important therapeutic uses of *Chandramrita rasa* are *Kasa* (cough), *Shwasa* (dyspnoea, asthma), *Jvara* (fever), *Rakta kasa* (coughing up blood from the respiratory tract i.e., haemoptysis) and *Adrak Swaras* is its *Anupana*.<sup>[17]</sup> Its ingredients like *Triphala*, *Trikatu*, *Maricha Parada*, *Gandhaka*, *Loha bhasma*, *Tankana* and *Saindhava* possess *Vatahara* and *Kaphahara* properties and thus have special action on respiratory system disorders. It gives relief to lungs and eliminates accumulated phlegm from lungs. It helps in expelling out mucus, which is accumulated in the respiratory tract and in sinuses present in face. It has good digestive action because of its *Tikshna*, *Laghu* and *Ushna guna*. So this combination in whole is providing the properties which are necessary to treat *Vatik Kasa*. Thus helps in pacifying the symptoms of *Vatik Kasa*.

## CONCLUSION

The current case series may provide leads to the management of symptoms of *Vatik Kasa* in era of COVID 19 to the patients who visited the OPD. *Abhyanga* with *Sarshapha Taila* mixed with *Saindhava lavana* and *Vashpa swedana* helps in pacifying the *Vata*. *Haritaki churna* as *Anulomna Vatahara* properties of *Vasavaleha* and *Chandramruta rasa* helps to alleviate the symptoms of *Vatik Kasa*. Internal medication to patients was given *Muhura muhura* every 2 hours along with strict *Pathya Palan*, all the three patients got immediate results within 3 days of time. Rest of the symptoms showed significant improvement within 10

days of treatment. However, the current study is limited to a few number of patients; more trials are needed to evaluate the efficacy of this treatment combination. The usage of *Vasavaleha* and *Chandramruta* rasa along with *Haritaki churna* and *Abhyanga* with *Sarshapha Taila* mixed with *Saindhava lavana* and *Vashpa swedana* showed quick and highly significant improvement in the symptoms *Vatik Kasa*.

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