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An Ayurvedamanagement of *Vataj Kasa* – A Case Study

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Authors' contributions

This work was carried out in collaboration among all authors. 'All authors read and approved the final manuscript.

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Case Study

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ABSTRACT

The *Prana and Udana*Vayu are responsible for normal functioning of *praanvahasrotas*, which can be altered due to causative factors in turn lead to manifestation of *Kasa* which is characterized by these *lakshanasShuska gala*, *Shuskakasa with shuskaalpakapha*, *Swarbheda*, *ParshavShool*, *Shriashool*, *Urashool*, *Dourbalya* etc. Paediatric age groups are more prone to respiratory tract infections, immunological concerns, and social factors such as school attendance, incorrect eating, and eating habits due to anatomical and physiological characteristics. Ayurveda has a lot of drugs to cure respiratory disorder, So this case study was conducted and get the positive result in treatment.

AIM: To evaluate the efficacy of ayurveda management on vatajakasa.

Study Design: Single Case Study

Place: Parul Ayurved Hospital, Parul University, Limda, Vadodara, Gujarat.

Duration Of Study: 14 days and follow up after 7days.

Methodology: Internal medication to reduce the sign and symptoms of vatajkasa.

As a result, this article addresses the problem using Ayurvedic treatment methods like Aparajit Avaleha, which delivers a safe and effective solution.

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Keywords: Praanvahasrotas; vatajakasa; shuskakasa; swarbheda; Paediatric.

1. INTRODUCTION

Avurveda is the Indian science of how to create a long and healthy life [1]. Ayurvedic medical science is one of the world's oldest holistic healing systems [2]. Science of Ayurveda has evolved from the contemplative minds of ancient seers for the intension to heal all the humanity [3]. It deals with the dynamic changes and effects, which occurs in the body and explains methods to manage these changes. Disease can be caused by two factors internal and external, with external contributing to over 80% [4]. Outside factors include mostly infections and infestations, allergens, food and environment. Main internal factors include body immunity, susceptibility aenotypic and physiological state of peculiarities at different stages of life [5].

The Prana and UdanaVayu are responsible for normal functioning of praanvahasrotas, which can be altered due to causative factors in turn lead to manifestation of Kasa. Vatajakasa which is characterized by these lakshanasShuska gala, Shuskakasa with shuskaalpakapha, Swarbheda, ParshavShool, Shriashool, Urashool, Dourbalyaetc [6].

Respiratory system is always in contact with the external environment from birth until death, so it is highly vulnerable to infections and in most circumstances is considered the primary victim of hyper-sensitization. In developing and developed countries around the world, Respiratory Tract Infections (RTI) reports for over 50 percent of patients attending paediatric OPD [7].

Cough is the reflex action to clear your airways of mucus and irritants such as dust or smoke. Common causes of cough are upper and lower respiratory tract infection, allergic bronchitis, pneumonia, hay fever, asthma, COPD, Tuberculosis. Dry cough means it is tickly and doesn't produce any phlegm (thick mucus). Dry cough includes shortness of breath, fatigability, sore and dry throat, heartburn, pain in flank region, dryness of mouth and throat, hoarseness of sound. Prevalence rate of cough is 9% in school going children worldwide. In India, mortality rate due to respiratory system disorders is increasing which is also, one of the six major categories of death and on the third position [8].

1.1 Aim and Objectives

To evaluate the efficacy of *ayurvedi* management- on *vatajakasa*

1.2 Objective

1.2.1 Primary objective

To find efficacy of AprajitaAvaleha in management of vatajakasa

1.2.2 Secondary objective

To find ayurvedic cure in respiratory disorder.

2. CASE DESCRIPTION

On 24/02/2020, a male patient aged 12 years, OPD reg. no. 20004991, visited OPD of Kaumarbhritya, ParulAyurved hospital, withShushkaKasa(dry cough),Shuska Gala (dry throat), Swarbheda, Parshavshool and frequent waking at night due to coughing. They took medicine from nearest medical centre but did not got relief. So, they presented to OPD of Kaumarbhritya, Parul Ayurved hospital for management of symptoms of ShuskaKasa (dry cough).

3. HISTORY OF PRESENT ILLNESS

Apparentely patient was healthy before 6 dayshe gradually acquired some bout of dry cough in the night and day with dry throat, Parshavshooland swarbheda. The patient was unconcerned about it and ignored it, but after some time, his mother noticed continuous bouts of dry cough with some roughness in his voice. After that patient's parents took her nearby hospital. There he was diagnosed with dry cough (vatajakasa) and given suitable medicine to him. Patient took 4 days of treatment but he didn't getfull relief. In order to get a suitable solution for above said complaints they visited our hospital ParulAyurved hospital further for management.

Associated Symptoms: Dry mouth and dry throat from 4 days

Past History: No any history of allergic disorder, any metabolic disorder, Asthma, TB.

Family History: Her grandmother was suffering with allergic bronchitis. She expired 3 years back.

Immunization Status: Immunized as per WHO schedule.

Personalhistory:

Bowel:- Constipation

Urine :- approx. 1300 ml /Day

Sleep:-Sound Krida:-Outdoor

Social History -

Residential Area:- Rural Personal Hygiene :- Poor Sanitation :- Poor

Drinking Water :- Tubewell

Family:- Joint Behaviour :- Normal

Developmental History:

Gross Motor:- Achieved Fine Motor :- Achieved

Personal And Social :- Achieved

Language :_ Achieved Toilet Training :- Achieved

Dietetic History:-vegetarian diet

A) General examination:

GC-Fair

BP-100/60 mm of hg Height- 145 cm Weight- 28 kg

Assesment Criteria:

Subjective Parameters:

Table 2.

Parameters	Grading
1. KASA VEGA	Grade 0:- absent
	Grade 1:- 1-5 episodes in a day
	Grade 2:- 2-10 episodes in a day
	Grade3 :- more than 10 episodes in a day
2.SWARBHEDA	Grade 0:- absent
	Grade 1:- present
3.SHUSKA MUKHA AND GALA (DRYNESS	Grade 0:- no dryness
OF MOUTH AND THROAT)	Grade 1:- mild thirst
	Grade 2:- thirst can be controlled
	Grade 3:- thirst that cannot be controlled

BMI-

Heart Rate :- 88/M Temperature :- 98.8 F Respiratory Rate: 20/M

B) Systemic Examination:

Respiratory System:-AEBE Normal Cardiovascular System: - S1S2 Normal GIT System :- P/A Soft And Non Tender

Central Nervous System: - Patient Was Concious

And Oriented

Local Examination:

Pallor:- Absent Jaundice :- Absent Clubbing:- Absent

Lymphnodes:-Not Palpable

Skin :- Normal Hair, Nails:- Normal

4. MATERIAL AND METHOD

Centre of Study: This study was carried out in Kaumarbhritya department of PARUL AYRVED HOSPITAL, LIMDA, VADODARA.

Study Design: Simple and Single Case Study.

Samprapati Ghataka:

Table 1.

DOSHA	Vata
DUSHAYA	Rasa
ADHISTHANA	PranvahaSrotus

4. SHIRASHOOL, PARSHVASHOOL AND	Grade 0:No Pain
UROSHOOL	Grade 1:Pain present only during coughing
	Grade 2:Pain present intermittently, irrespective
	of cough, not affect routine work
	Grade 3:Pain present continuously, irrespective
	of cough, affect routine work
5. TIME TO RELIEF FROM COUGH AND	Grade 0:- relief within 0-15 min
THROAT IRRITATION	Grade 1:- relief within 16-30 min
	Grade 2:- relief within 31-60 min
	Grade 3:- relief > 61 min
	Grade 4:- no relief
5. COUGH SYMPTOMS SCORE(CSS): DAY	Grade 0:- no cough during day
TIME	Grade 1:- cough for one short period
	Grade 2:-cough for more than two short periods
	Grade 3:- frequent coughing, which did not
	interfere with usual daytime activities
	Grade 4:- frequent coughing, which did interfere with usual daytime activities
6 COLICH SYMPTOMS SCOPE/CSS), NIGHT	Grade 5:- distressing coughs most of the day Grade 0:- no cough during night
6. COUGH SYMPTOMS SCORE(CSS): NIGHT TIME	Grade 0:- no cough during high
IIIVIE	
	Grade 2: traggest waking due to cough
	Grade 3:- frequent waking due to coughs
	Grade 4:- frequent cough most of night
	Grade 5:-distressing coughs preventing any
	sleep

Objective Parameters:

Table 3.

CBC:- Complete blood count	
AEC- Acute eosinophil count	

Treatment:

Table 4. line of treatment [9]

Day	AparajitAvaleha
0 th Day	10 gm In Three Divided Doses AF
7 th Day	10 gm In Three Divided Doses BF
21 st Day	Follow up period

Medication has given to the patient for 14 days with 1 follow up after 7 days done on 21stday. *Aparajit Avaleha* [10] given to the patient for reducing the above said sign and symptoms of *vatajakasa*.

5. OBSERVATION AND RESULTS

Regular oral use of *AprajitAvaleha* was observed. Which help in reducing the sign and symptoms of *vatajakasa*(dry cough).

After administration of drug patient got good symptomatic result i.esushkakasa, swarbheda, parshavshoola, Shushkamukha and gala, time to relief in cough and throat irritation, CSS day time, Css Night time. As Vatajakasa is sukhasadhyavyadhi explained by Acharya Kashyap.

6. DISCUSSION

6.1 Aparajit Avaleha

- **Aparajit** Avaleha contains Sati. Karkatshringi, Pippali, Bharangi, Nagarmotha, Yavasa, Tilataila and Guda (jaggery), in which Sati [12] has antiinflammatory, antiasthmatic Aromatic properties. These properties help this Avaleha in relieving the symptoms like swelling, breathing difficulty and better smelling is easy to take Avaleha by children. Krimi Ghana, UsnaVirya and Vatasamaka property provide relief in Vatajadoshasamana, kill kasa and microorganisms responsible for Kasa.
- Karkatshringi [13,14], has properties like relief in thirst, Parshavshool, loss of appetite and also provide relief in

- breathing difficulties. UshnaVirya help in vatadosha.
- Pippali [15,16,17] has anti-inflammatory, antibacterial, antispasmodic, and Immunostimulator properties. These properties help this Avaleha in relieving the symptoms like swelling, breathing difficulty, spasm of respiratory system and in boosting immunity of body. Krimi Ghana, UsnaVirya, Madhura Vipaka and Vatasamaka property provide relief in Vatajadoshasamana and kill microorganisms responsible for Kasa.
- Bharangi [18,19,20] has anti-inflammatory, antibacterial, antispasmodic, anti-allergic and expectorant properties. These properties help this Avaleha in relieving the symptoms like swelling, breathing difficulty, spasm of respiratory system, swarbheda and in boosting immunity of body. UsnaVirya, Vatasamaka property provide relief in Vatajadoshasamana, kasa

- and kill microorganisms responsible for Kasa.
- Nagarmotha [21,22,23] has antipyretic, dipana and pachana which cures fever and improves appetite and digestion.
- Yavasa [24,25] has anti-inflammatory, analgesic, anti-pyretic, thirst affection and expectorant properties. These properties help this Avaleha in relieving the symptoms like swelling, fever, shiroshool, parshavshool, uroshool, shuska gala and mukha. Madhura rasa and vipaka and guru, snigdhaguna provide relief in VatajaDosha and Kasa.
- TilaTaila [26,27,28] have properties snigdha, usna, madhura, guru and Guda have properties madhuravipka and ruchya in nature. These properties help in vatadoshasamana and easy to digest and makes avaleharuchikarka.

Table 5. Observation during treatment (Subjective Parameter)

SYMPTOMS	GRADING		
	0 TH DAY	7 TH DAY	14 TH DAY
Sushkakasa	2	1	0
Swarbheda	1	0	0
Parshavshoola	1	0	0
Shirashoola	-	-	-
Shushkamuka and gala	2	1	1
Crepitation and wheezing	-	-	-
Time to relief in cough and throat irritation [11]	4	2	0
Cough symptoms score [11]			
Day time	1	1	0
Night time	3	2	0

Table 6. Observation Bt-At treatment (objective parameters)

INVESTIGATIONS		ВТ	AT
		0 ^{1H} DAY	14 TH DAY
Hb%		11.1 gm/dl	11.3
AEC		568	356
ESR		-	-
TOTAL		12,400	8700
WBC (CELL,MM ³)			
DIFFERENTIAL COUNT (%)	NEUROPHILS	75	48
	EOSINOPHILS	18	16
	BASOPHILS	4	4
	LYMPHOCYTES	3	2
	MONOCYTES	0	0

Table 7. Symptomatic Relief

Symptoms	Percentage
SUSHKA KASA	100%
SWARBHEDA	100%
PARSHAV SHOOLA	100%
SHIRSHOOLA	-
SHUSHKA MUKH AND GALA	50%
TIME TO RELIEF IN COUGH AND THROAT	100%
IRRITATION	
COUGH SYMPTOMS SCORE	100%
DAY TIME	100%
NIGHT TIME	

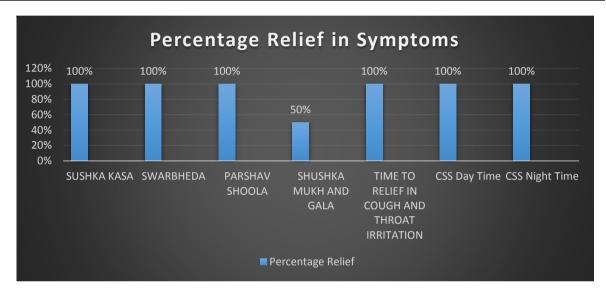


Fig. 1. Graphical presentation of symptomatic relief

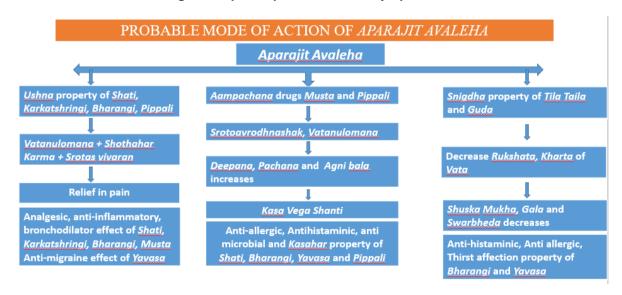


Fig. 2.

7. CONCLUSION

VatajaKasais a prominent feature of vitiation of Vata and it is of more concern especially in children about respiratory disorder. Ayurveda remedies may have high potential to control the VatajaKasawithout any complication. In this study encouraging results was obtained in VatajaKasa. There is significant reduction in the symptoms of Kasa with the use of AparajitAvaleha and is found to be safe and effective.

DISCLAIMER

The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s). IEC: - Apporved (PU/PIA/IECHR/2019/163)

CONSENT

As per international standard or university standard, patient's written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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