

CLINICAL EXAMINATION OF PRANVAHA STROTAS; AYURVED AND MODERN VIEW: A REVIEW

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ABSTRACT

Ayurveda describe various diseases in different category including *Shwas Vyadhi* which are associated with derangement of *Pranvayu* and *Pranvah Strotas*. *Urdhva, Maha, Chinna, Tamak & KShudra* is considered under *Shwas Vyadhi*. Ayurveda also described various treatment modalities for the management of such disease however proper diagnosis is very essential for targeting disease pathogenesis. The diagnostic approaches involve various modalities including; frequency of wheezing, examination of lungs, prolonged expiration, presence of tachypnea and observation of respiratory rate. This article presents conceptual understanding of *Pranvayu, Pranvah Strotas* and clinical diagnosis of *Pranvayu Vyadhi*. Ayurveda diagnosis involves *Naadi Pariksha*, urine and stool examination, examination by palpation, *gait*, appearance of the patient and examination of *prakriti*.

KEYWORDS: Ayurveda, Strotas, Pranvah Strotas, Pranvayu Vyadhi and Nidana.

INTRODUCTION

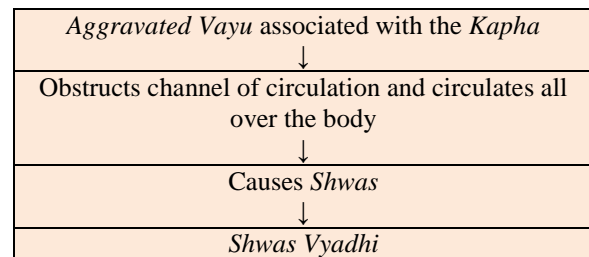
Ayurveda the system of traditional medicine belongs from India describe different approaches for maintaining good physical and mental health. Ayurveda mentioned importance of *Ambar Piyush* (oxygen) which inhaled during process of *Shwashan Prakriya*, which is very essential for the physiological functioning of organs and maintaining *Jatharagni*. *Pranvaha strotas* play vital role in this process which is a *Darun Strotas* and resembles respiratory system of modern science. *Strotas* encompasses structures are like ducts, blood vessels, capillaries, organs and *ashaya*. *Pranavaha strotas* is one of the important *strotas* of the body in which air entered to pharynx, trachea and bronchioles followed by alveoli. Nasal opening is the starting point of *Pranavaha strotas* which supply oxygen to haemoglobin through alveoli. The common path or passage start form nose to alveoli, alveoli to heart through pulmonary veins and heart to cells or tissue through arteries.^[1-3]

The disease manifest in *Pranvah Strotas* are called *Pranvah Strotas Vyadhi* or *Shwas Vyadhi* involving pathological progression in respiratory system. The fresh *Vayu* responsible for physiological functioning of body while *dushti Vayu* involves in pathological manifestation of diseases. The ayurveda text described various types of *Pranvah Strotas Vyadhi* i.e; *Urdhva, Maha, Chinna, Tamak & Kshudra*.^[3-5]

Signs and symptoms of *Pranvayu Vyadhi*

- Non productive cough
- Dyspnea
- Wheezing on expiration
- Tachycardia
- Moist skin
- Fatigue
- Prolonged expiration

General pathological sequencing of *Pranvah Strotas Vyadhi*



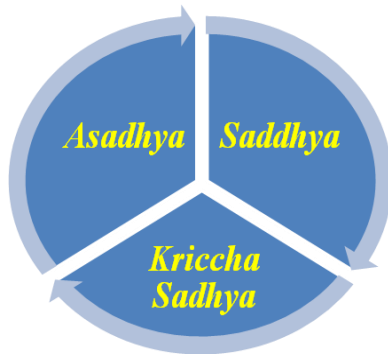


Figure 1: Shwas Vyadhi according to prognosis.

The modern allopathic system and ayurveda described various diagnostic techniques for the identification of *Pranvah Strotas Vyadhi*. The clinical examination of *Pranvah Strotas* along with other investigations such as; complete blood count (eosinophilia), urine routine, stool examination, CVS examination (S1 & S2 sound) and analysis of radial pulse, etc. also recommended for proper diagnosis of *Pranvah Strotas Vyadhi*.^[6-8]

Ayurveda physician examines following clinical symptoms of *Pranvah Strotas Vyadhi*

- ❖ *Shwas teevra wega*
- ❖ *Shwas sashabda*
- ❖ *Kaasa*
- ❖ *Uro Vedana*
- ❖ *Aasino labhate soukhyam*
- ❖ *Nidraalpata*

Trividh Pariksha for Pranvah Strotas Vyadhi

The *trividh pariksha* is one of the important approaches of disease diagnosis which involve use of palpation method (*sparshana*), physical inspection of patient condition (*darshana*) and interrogation (*prashna*). These three methods *sparshana*, *darshana* and *prashna* also help significantly to identify severity of respiratory tract infection or *Pranvah Strotas Vyadhi*.

Sparshana and Darshan

The *Sparshana & Darshan* in *Pranvah Strotas Vyadhi* considered identification of any shrunk body parts, skin color (redness/inflamed), dryness and appearance of eyes. *Sparshana* examines of patient by touching. The palpation as touching sensation in *Sparshana* method provides idea about respiratory rate and any deviation in respiratory rate may be considered as *Pranvah Strotas Vyadhi*. The *Sparshana* involve pulse reading, temperature reading, blood pressure monitoring, dryness and sensitivity measurement associated with allergic problem. Physician made conclusion in respiratory diseases using *Sparshana & Darshan* method using rigidity or softness of organs, texture of skin, condition of swelling/inflammation, body temperature and pulse rate.

Table 1: Role of Sparshana and Darshan Pariksha in diagnosis of Pranvah Strotas Vyadhi.

S. No.	Sparshana and Darshan Pariksha	Observations	Possible inference
1	Sparshana: Pulse Rate	Disturbed	<i>Pranvah Strotas Vyadhi</i>
2	Sparshana: Temperature	High	
3	Sparshana and Darshan: Sensitivity of organs (ear, eye and nose)	Hypersensitivity	
4	Darshan : Swelling/inflammation	Present	
5	Darshan: Mucous secretion	Excess/continuous	
6	Darshan: Nasal discharge	Excess/continuous	
7	Sparshana: Chest examination	Presence of <i>Kapha</i> and irregular rhythm	
8	Darshan: Discharge from eye & contiguous wheezing	Present	

Prashna

Questioning is one of the important aspects of diagnosis process and question/answer session between patient and physician also play vital role towards the diagnosis of respiratory disease. However some questionnaires are general (not disease specific) such as; name, age, profession, habits or addiction and family history of patient. These general questionnaires commonly asked by every physician to their patients. Specific interrogation involve use of disease related questionnaires such as; complaint, duration of the complaint, addictions, diet and habitat, presence of related diseases, sleep pattern and questions which help

physician to diagnose severity of *Pranvah Strotas Vyadhi* are as follows:

- Questioning about itching, watering, swelling, dryness and burning sensation in eye.
- Questioning about itching, popping, frequent infections, congestion, fluid secretion and ache in ear.
- Questioning about sneezing, itching, sniffles, discharge and congestion in nose.
- Questioning about sore throats, itchy throat, swallowing, tonsillitis and hoarseness in throat.

General clinical investigations of *Pranvah Strotas*

- Examination of external nose
- Examination of vestibule
- Anterior Rhinoscopy
- Posterior Rhinoscopy
- Functional examination of nose
- Pulmonary tuberculosis test
- Chest X-ray
- Radiological: x-ray PNS
- Endoscopic: Functional nasal endoscopy

Diagnosis criteria

- Foul smell
- Anosmia
- Dryness of nose
- Crusting
- Nasal discharge
- Blocking of nose

Specific Diagnosis for *Maha Shwas*

- Spirometry, arterial blood gas, lung scan, ventilation perfusion scan and bronchoscopy.

Specific Diagnosis for *Urdhva Shwas*

- Spirometry, nasopharyngoscopy, pulmonary function test and X-Ray.

Specific Diagnosis for *Chinn Shwas*

- Bronchoscopy, X-Ray, MRI and CT scan.

Specific Diagnosis for *Kshudra Shwas*

- Arterial blood gas, partial pressure of oxygen and lung scan.

Specific Diagnosis for *Tamak Shwas*

- Partial pressure of carbon dioxide, pulmonary function test, allergy testing and sputum eosinophilia.^[9-10]

Advantages of clinical examination of *Pranavaha strotas*

- Understanding of *Pranavaha strotas* help to know *strotas mulasthanas, vidha laxanas & vahana* which help to identify root cause of disease.
- Rate of respiration and condition of prolong respiration helps to know types of *vyadhi*.
- Internal & external factor which may affect working of *Pranavaha strotas* may be identified by clinically examining *Pranavaha strotas* in different conditions (seasonal variation).
- Clinical examination of *Pranavaha strotas* help to understand physiological functioning of heart, lungs and pulmonary vessels.
- The clinical examination of *pranavaha strotas* not only enable physician to diagnose *strotas vyadhis* but also other disease mainly associated with vitiated *kapha*.^[6-10]

CONCLUSION

Shwas Vyadhi are occurs due to the *Pranvah Strotodushti* which resembles diseases of respiratory system as per modern science. Ayurveda mainly describe 5 types of *Shwas Vyadhi* and disease management approaches requires identification of root cause of *Vyadhi* using appropriate diagnostic techniques. The diagnostic approaches involve various modalities including; frequency of wheezing, spirometry, examination of lungs, arterial blood gas, prolonged expiration, ventilation perfusion scan, presence of tachypnea and observation of respiratory rate, etc. These all diagnostic approaches help greatly to treat specific disease with selective treatment approaches.

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