ABSTRACT

Prakriti parikshana is unique to the Ayurvedic system of Medicine. Knowledge of Prakriti is conducive to health as well as to formulate an effective treatment regimen when confronted with a diseased state. Determination of an individual’s Prakriti aids in maintaining the equilibrium of Doshas, to predict a susceptibility to a certain Vyadhi in the future, to ascertain the prognosis of a prevailing Vyadhi and for the adjustment in dosing and choosing appropriately potent drug for a disease. It is all but easy to determine an individual’s Prakriti in health, but the unreliability in this process occurs when an individual presents with a diseased state; in which case, the Dosha constitution may be compromised and give varying results while eliciting history or performing a clinical examination for Prakriti determination. Pranavaha srota$asa$ may be clinically correlated to the respiratory system of Modern anatomy and physiology. It is one of the most vulnerable systems as it is in a direct communication with the external environment almost all the time. Diseases of Pranavaha srota$asa$ are rampant in our country and Prakriti parikshana in health by the patients are just gaining momentum with the global spread of Ayurveda. Thus, it becomes essential for the physician to determine the Prakriti of the patient in an acute diseased condition, which is often overlooked or incorrectly predicted. An attempt is made in this paper to formulate proper Prakriti determination criteria along with its merits and demerits, as well as its reliability when presented with a Pranavaha srotovikara.

KEYWORDS: Ayurveda, Prakriti parikshana, Pranavaha srotovikara.

INTRODUCTION

Acharya Charaka has described Pranavaha srotasa as the first among the thirteen Srotasas. By Pranavaha srota$asa$ it is meant that the group of organs concerned with maintenance of life. As all Srotasas are important for sustaining life, Charaka further emphasizes the utmost importance of Pranavaha srota$asa$ than the other Srotasas. Hridaya and Mahasrotasas are stated as the Mulasthana of Pranavaha srota$asa$.[1] This statement differs from that of the Modern Medical Science which considers lungs (Plu$ppu$su$a$) to be the most integral part of the respiratory system. Barring this difference in views, the clinical findings are remarkably similar for Pranavaha srotovikaras and diseases of respiratory system.

Diseases of Pranavaha srota$asa$ are found to be prevalent in Balyawastha due to Kapha predominance and in Vriddhawastha due to Vata predominance. The nature of these diseases is often variable as many exhibit an Ashukari nature[5], while others are distressing and life threatening in a chronic form. Exacerbations are usual occurrences and prognosis of the disease is also variable ranging from Sukhasadhya (favourable) to Asadhy$a$ (poor). Thus, it becomes necessary for the physician to effectively treat these diseases, and if they are found to be Yapa$ya$ (palliative), then to maintain their remission as long as possible.

Before undertaking examination of the Rogi (patient), it is necessary for the physician to have a thorough knowledge of the normalcy of the human being in all aspects. Nothing can be judged as abnormal without knowing the normal and if any such judgement is made, it is bound to be incorrect. Hence, it is essential that Prakriti pariksha$sa$ is done first and Vikruti parikshana next, for the latter is based on the former.[3] The concept of Prakriti is unique to Ayurveda. Prakriti is one’s own constitution and attitude. It is an expression of body functions in the form of morphology, physiology and behaviour of an individual. During the development of foetus, due to its own reasons, Doshas become intensified. This non-pathogenic intensified status of Doshas which remains constant from birth until death is

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called Prakriti. The psychosomatic expression formed due to predominance of Doshas in every individual is called Dehaprakriti.

The characteristic features mentioned in the Ayurvedic Classical Texts are best seen during health, and so, very much valid to certify for health. Even when a person becomes sick, it is necessary to decide his normal Prakriti, so as to understand the nature and severity of the disease, reaction of body to drugs, etc. Therefore, Prakriti pariksha is very much important in a patient. Here a doubt may arise in our minds that, during a diseased condition everything in the patient’s body will have become abnormal and so, determination of his Prakriti will not only be incorrect but unreliable. By stating that inborn characteristic features of Doshaprakritis are not going to change totally or all of a sudden; such a change, if at all, comes on just before death (Gatyus), whereas, during diseased condition, many parts of the body retain their original features, on the basis of which determination of Doshaprakriti will be possible. Thus, the physician should sincerely try for it.

MATERIAL AND METHODS
A thorough study of Pranavaha Srotovikara was done from Ayurvedic classical texts. Clinical findings for various respiratory system disorders were critically studied from textbooks of Modern Medicine. The inferences drawn were inculcated into the knowledge of Prakriti Parikshana Siddhanta and a practical approach for determining Prakriti in the setting of pathology w.s.r. to Pranavaha Srotovikara was made. Individual experiences of physicians and students alike were also considered.

ASSESSMENT OF DOSHAJA PRAKRITI OF A PATIENT WITH PRANAYAHA SROTOVIKARA
Sharira (body as a whole)
Height is a preferred parameter but weight of the patient should be assessed along with it. Body mass index may be helpful in this case. Nutritional status of the body may be compromised due to chronic debilitating disorders like emphysema, pulmonary tuberculosis, etc. Classics have mentioned such disorders which cause Dhatukshaya viz., Kshatakshina, Rajayakshma. In such cases, due consideration should be provided to the nature, severity and duration of the underlying disease process. Examination of the face to observe if it is Durbhaga, Subhaga, Sukumara, etc. may be helpful in determining Prakriti, but this may be misleading during acute exacerbations like septicemia due to pneumonia, adenoid facies, etc. Presence of Bahusirapratana (visible veins) is an attribute of Vataprakriti but must be dealt with care if their presence is recent, as they may suggest a failing right ventricle or a superior venacaval obstruction. Bahupiplu, Tila, Vyanga, Pidaka may provide clues to the Pittaja prakriti of the patient.

Twak (skin)
Quality and complexion of skin deteriorates in disease states due to suppressed immunity, impaired hydration status or reduced perfusion. A cyanotic hue is evident in hypoxemic states, whereas, the modern medical terms pink puffers and blue bloaters used for patients with chronic bronchitis and emphysema respectively should be kept in mind before investigating the patient for Prakriti determination.

Roma (body hair)
These are minimally affected in Pranavaha srotovikara and are relative to the condition of the skin indirectly. Hair and scalp may provide clues for determination of Prakriti, as these are not often involved in respiratory disorders. History of drug intake like corticosteroids, Somala (arsenic) containing compounds needs to be produced if there is premature loss of scalp hair. Otherwise, the colour, pattern and texture of Kesha are helpful parameters of determining Prakriti.

Shiras (size of head)
Size of the head of a patient is a useful predictor for determining Prakriti. Fluctuations in the size of head is rare in respiratory disorders. Infrequently, it may be seen in infants who have hydrocephalus contributing to tachypnoea which is evident on examination and needs to be ruled out if such condition exists.

Lalata (forehead)
Size of the Lalata is important for getting an insight of the Doshaaja constitution of an individual as it is readily apparent on inspection. Alpa Lalata is seen in Vatajaprakriti, Mahata Lalata is seen in Kaphajaprakriti and Valiyukta Lalata is found in Pittajaaprakriti. Exception to these rules are children suffering from thalassemia who have a frontal bossing, and elderly patients with Paget’s disease and acromegaly. Respiratory symptoms although are rare in Paget’s disease and acromegaly but may occur in severe anemia due to thalassemia in which case they are related to effort.

Bhru (eye brows)
These are minimally affected in Pranavaha srotovikara. Their size and texture along with the density of hair may be of value in designating a particular Prakriti to the patient.

Pakshma (eye lashes)
Examine on the same grounds as that for Bhru. It is important to rule out local and ocular causes like Pakshmakopa before interpretation to assign a Prakriti.
Netra (eyes)
Gaze of the patient, size of eyes from inner to outer canthus, size of the eyeball according to the palpebral aperture and any ocular or extraocular disease of the eye should be ruled out. Phtisis due to Horner’s syndrome is seen in Pancoast’s tumour of lung. Allergic conjunctivitis may accompany allergic rhinitis commonly in a clinical setting. In our Ayurvedic classics, involvement of eyes has been considered as being a part of clinical spectrum. Vibhranta lochana (unsteady eyes) has been stated to be as a feature in Mahashwasa. Urdhwa pradrishti is stated in the clinical features of Urdhwa Shwasa and Tamaka Shwasa. Epiphora or excessive lacrimation with a unilateral redness of eye has been described as a feature of Chhinna Shwasa. Thus, it is important to address above conditions before including Netra as a parameter to assess patient’s Prakriti.

Nasa (nose)
Size and shape of the nose may be affected due to early-onset respiratory disorders. A pinched-up nose along with a high arched palate is usually seen in mouthbreathers, commonly in children with enlarged adenoids causing respiratory insufficiency. Flaring of the alae nasi is a known feature of acute exacerbations of chronic obstructive pulmonary disease especially chronic bronchitis. A deviated nasal septum may cause disfiguration of nose, however, a history of trauma to the nose is often present. Thus, examination of Nasa for Prakritivinishchaya may be helpful once the above conditions are excluded.

Danta and Dantaveshta (teeth and gingivae)
People who are chronic smokers may have an increased number of dental caries and gingival atrophy. Fluorosis of teeth should be checked in areas with water of high fluoride content. Falling of teeth in elderly has to be considered before including Danta and Dantaveshta as a parameter for Prakriti determination.

Jihwa (tongue)
Tongue if physiologically large in size may occlude the upper airway to cause difficulty in breath especially on lying supine. Hypothyroidism (myxoedema) and acromegaly are some relatively common condition causing macroglossia. Other rare causes are amyloidosis and glycogen storage diseases. Respiratory disorders alone are unusual to cause a hypertrophy or elongation of tongue. Thus, examining the tongue in respiratory disorders to determine Prakriti appears to be favourable.

Oshtha (lips)
Size of Oshtha is not affected in respiratory disorders. Cyanosis and pursing of lips for convenience of respiration are inadequate to rule out Oshtha as a parameter of Prakriti parikshana in Pranavaha srotovikara.

Hanu (lower jaw)
This offers to be quite a good predictor for assessment of Prakriti in a patient with Pranavaha srotovikara. A Hanu which is Tanu (thin), Alpa (small) is seen in Vataprakriti. Prithu (thick), Mahat (big) Hanu is an attribute of Kaphaprapakriti, whereas, a medium sized Hanu (Madhyama) is found in Pittaprapakriti.

Skandha (shoulders)
Skandha pradesha vikriti is not a usual accompaniment of respiratory disorder; thus, it is feasible to include this parameter in determining the Prakriti in acute and minor ailments of the Pranavaha srotas. Drooping of shoulders bilaterally is seen as an individual crosses the middle-age. Unilateral drooping of shoulder should raise suspicion of an underlying pathology, especially a destructive lesion of apex of ipsilateral lung, usually seen in pulmonary tuberculosis. Local and systemic causes (myasthenia gravis) have to be ruled out before interpreting Skandha as a part of Prakriti.

Vaksha (chest)
Deformities of chest are evident from inspection. Conditions like pectus excavatum and pectus carinatum have to be investigated to determine if they are secondary or congenital. A precordial bulge may be seen in the presence of right ventricular hypertrophy. Barrel-shaped chest is evident in the presence of long standing cases of bronchial asthma and chronic obstructive pulmonary disease. Congenital absence of pectoralis major may disfigure the shape of chest. Spinal deformities like scoliosis also affect the appearance of chest. Thus, above conditions need to be addressed before taking Vaksha characteristics as a parameter for Prakriti determination.

Bahu (arms), Pani (hands), Pindika (calves), Pada (feet)
Unless there is overt muscle wasting and malnutrition, the size, shape and consistency of arms, hands, calves and feet is a favourable predictor of an individual’s Prakriti in the setting of Pranavaha srotovikara.

Sandhi (joints)
Joint involvement is frequently spared in respiratory disorders. Arthralgia if present, especially in presence of a viral infection, is of a minor concern and does not interfere with the determination of Prakriti. Age of the patient and local pathologies if present need to be addressed.

Nakha (finger and toe nails)
Nails are frequently affected in chronic respiratory diseases. Their structure and complexion are both affected in multiple diseases. Bronchiectasis, aspergillosis, emphysema, chronic bronchitis frequently present with varying degrees of clubbing, although, it is more evident in the finger nails than the toe nails. Peripheral cyanosis due to hypoxemia and anaemia of chronic disease may alter the colour of the nail bed.
Thus, examination of nails if possible, needs to be carried out at the toes than at the fingers for determining Prakriti of the patient with Jeerna Pranavaha srotovikara.

Deha gurutwa (body weight)
This depends on the duration from onset, nature and chronicity of the disease as well as the dietary values the patient has been following. Historical evidence from the time of health needs to be asked for which makes this parameter less reliable when determining Prakriti.

Deha cheshta (activity)
In minor ailments of the respiratory system this may be insignificantly affected. Tendency of locomotion may be slow or reduced to such an extent of being confined to bed, especially in severe diseases, in which case eliciting the Deha cheshta and drawing inferences from it may not be largely possible.

Mala-Mutra (stool and urine)
Their reliability in a pathologic state may be variable and thus, their characteristics in the past healthy state of the patient may be helpful in coming to a stand regarding Prakriti determination.

Bala (strength)
Bala, in the setting of respiratory disorders can be assessed specifically by using a validated peak expiratory flow meter. Deha bala is measured from the Vyayamashakti of that individual and if feasible to the clinical condition of the patient may be used as a diagnostic tool for Prakriti. Occupational history or Viharaja Vrittanta from the past healthy state may also help in Prakriti determination.

Shareera gandha (body odour)
This is very variable and thus, unreliable for Prakriti determination. A second hand information may be gathered from the patient’s family members and friends regarding this attribute.

Swaray (voice)
Larynx is a prominent component of the respiratory system. Minor conditions like laryngitis may cause a significant loss of voice quality. Articulation on the other hand is not affected significantly. Kshaama swara (feeble voice), an attribute of Vatapracriti may be seen in some grave but rare diseases like bronchial carcinoma compressing the left recurrent laryngeal nerve, which has to be ruled out if a patient has a recent developing husky voice or bovine cough. Thus, Swara, if unaffected from history, can be used to determine Prakriti. Now-a-days patients on inhaled corticosteroids develop hoarseness of voice due to their long term use.

Vak (speech)
A severely dyspnoeic patient may communicate with great difficulty by speaking in short bursts and small sentences to cope with his/her respiratory insufficiency. This is commonly seen in acute exacerbations of chronic obstructive pulmonary disease and bronchial asthma. Excluding above conditions, Vak as a parameter for Prakriti determination may be readily used.

Ichha dwesha (likes and dislikes)
These are purely subjective features with respect to Ahara, Vihara, hobbies, etc. and may be elicited from history considering the healthy time period of the patient.

Manasika lakshanatas and Chestas (mental temperament and behaviour)
This includes Smriti, Medha, Dhriti, response to emotional stimuli, theological beliefs, social behaviour, sleep patterns, sexual desires, etc. These can be elicited from history in an alert and oriented patient after excluding features of hypoxic brain injury like conditions that may impair the mental status of the patient. The Mini Mental State Examination questionnaire may be helpful in deciding the mental status of the patient before initiating the process of history-taking.

DISCUSSION
The parameters for determination of Prakriti provided by Ayurvedacharyas are perfectly stated. A sound knowledge of disease processes and applying it for every diseased condition according to the parameters of Prakriti determination may help the physician to diagnose the patient’s Prakriti with less efforts and more efficiency. It can be seen that, when confronted with a patient having Pranavaha srotovikara, the most reliable parameters for Prakriti determination are- Sharira Pramana especially height, Roma, Kesha, Shiras, Lalata, Bhru, Pakshma, Danta and Dantaveshtha, Jihwa, Oshtha, Hanu, Bahu, Pani, Pindika, Pada, Sandhi and Vak. Purely subjective and parameters that rely heavily on history and second hand information may be unreliable and time consuming in a busy practice. They may be of value when considering the diseases of other Srotasas.

CONCLUSION
Prakriti in a pathological state needs to be assessed by all means for an effective treatment. A thorough knowledge of normal and abnormal attributes of one’s constitution in a diseased condition has to be present. The positive and negative predictive values for every parameter for any given disease have to be made for efficient Prakriti determination. This may be tiring at first but once made will always serve the physician and the coming crop of Ayurvedic scholars.

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