

CRITICAL EVALUATION OF JIVHA PARIKSHAN IN DIAGNOSTIC METHODOLOGY

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ABSTRACT

Introduction: *Ayurveda* is the most ancient system of Indian medicine. *Ayurveda* emphasize in diagnosing disease for that *Vaidya* must have the knowledge of depth of vitiation of *Doshas*. To diagnose the disease various kinds of *Rogi Pariksha* are mentioned in *Ayurveda samhita*. *Ashtavidha Parikshan* (Eight fold Examination) is explained by *Acharya Yogratnakar*. Out of which *Jivha parikshan* is one of them. As we all know tongue is the mirror of gastrointestinal tract. Any impairment or any disease of gastrointestinal tract gets reflected by tongue. According to *Ayurveda* root cause of disease is *Agnimandya* (Hypo functioning of digestive fire). *Saam jivha* (Coated tongue)

indicates the presence of *aam* (undigested food) in digestive system, thick coating on tongue indicates the presence of disease. So *Jivha parikshan* is a very important for the diagnosis and prognosis of various kind of diseases. So we can say that *Jivha parikshan* is one of the diagnostic tool in *Ayurveda*. **Aim** - To Study importance of *Jivha parikshan* in diagnostic methodology. **Objectives** – To Study importance of *Jivha parikshan* in diagnostic methodology from *Ayurveda* texts and its application in diagnosing the various kind of diseases. **Material and methods** – This is a conceptual study for which various *Ayurveda* and modern text, *samhitas*, published articles, research papers and information available on internet is used. **Discussion** – *Jivha parikshan* is very important in routine examination of patient as it is a part of *Ashtavidha Parikshan*. During examination one should expert in

diagnosing the disease from the shape, colour, coat of the tongue. Skillful knowledge of *Jivha parikshan* is needed for proper diagnosis of disease and treatment. **Result** – *Jivha parikshan* is very important tool in Ayurveda for the diagnosis and prognosis of disease.

INTRODUCTION

Ayurveda is system of medicine with historical roots in Indian subcontinent. *Ayurveda* emphasize in the diagnosis of disease. To diagnose a disease physician must have the knowledge of depth of vitiation of *Doshas*. Also to diagnose a disease in *Ayurveda* various investigation viz. *Parikshan* are explained in *Ayurveda* texts. *Acharya Yogaratnakar* explained the *Ashtvidha Prikshan – Ashtasthaan Parikshan* (The Eight Folds Examination in *Ayurveda*) out of which *Jivha Parikshan* is one.^[1]

Tongue is sensory organ according to *Ayurveda* and modern science. Tongue is an organ that reflects the physiological and clinopathological conditions of the body. Tongue develops from the brachial arch in the 4th week of intrauterine life. Tongue has various function such as speech, mastication, deglutition and taste. A thorough examination of the Tongue is an integral part of the physical examination and may provide clues to the systemic condition ; nevertheless, it has been the most neglected organ within the zone of interest.

According to *Ayurveda* tongue is not just an organ of taste but also a strong tool for diagnosis. As we all know tongue is the mirror of gastrointestinal tract system disease because it is an accessory organ as well as any impairment in GIT reflects by tongue.

This article emphasizes on the importance of clinical examinations of the Tongue and available special investigations for early diagnosis and management of disease. A Tongue is medium size in relation to overall body size is a fresh pink colour with thin and moist coating without any markings. Examination of Tongue provides important information on health of a person, particularly for diagnosis of digestive disorder. During examination one should examine the shape, size, colour, contour, character to interpret proper diagnosis.

MATERIALS AND METHODS

Healthy Tongue^[2]

It is *Shlakshan* (neither too dry nor too wet) and *shuchi* (clean – doesn't emit a bad odour or taste). The veins underneath the Tongue is not distended or dilated.

Colour – *Shyavarakta* (Uniformly pink, similar skinned chicken or pale red)

Shape – *Tanu* (neither too thick nor too thin and has even width or shape is oval)

Moisture – *Shlakshan* (A healthy tongue is moist)

Coating – *Nirlipta* or *Ishatlipta* (Thin transparent or white coating)

Movement – *Akampa* (That is when tongue protrude it is steady)

Examination of Tongue^[3]

- For examining the tongue patient should be in a sitting or supine position.
- Instruct the patient to open mouth and protrude the tongue for clear visualization and observe it carefully for its surface, size, colour, coating etc. to know the health status of an individual.
- A good illuminating light and mouth mirror are the main requirements for the examination of the intraoral structures.
- Initially overall examination of the oral cavity is made then examination of dorsal and ventral surface ask the patient to protrude tongue and move sideways and then examine, Tongue is stabilize with cotton or gauze and examination carried out for colour, shape, size and surface of tongue. To examine tongue the tongue is depress by using the tongue depressor to observe the similar changes in baseline of the tongue and circumvallate papillae. Other changes like swelling, ulcer, fissure, atrophy or hypertrophy of papillae should be noted. Any pathological or physiological changes should be noted. Using gloved hand, palpation should be done, hold the tongue and palpate.

Acharya Yogaratnakar explained the characteristics of *Jivha* according to *Doshas*^[4].

*Vata Dosh*a – In *Vata* vitiation the tongue is dry (*Ruksha*), rough, cracked(*Sphutita*).

*Pitta Dosh*a – In *Pitta* vitiation tongue is reddish black(*Raktashyama*).

*Kapha Dosh*a – In *Kapha* Vitiation the tongue is whitish coated(*Shubhraatipishchilla*)

In vitiation of all three *doshas*, tongue is inflamed at periphery, rough, blackish.

As stated earlier during tongue examination one should examine the size, colour, surface, movements these are as follow –

SIZE^{[5][6]}

Macroglossia (<i>Dirghajivha</i>)	Microglossia (<i>Hriswajivha</i>)
Acromegaly	Pseudobulbar Palsy
Cretinism	Facial Hemiarthropathy
Myxoedema	Starvation
Lymphangioma	Marked dehydration
Amyloidosis	<i>Bijadosha</i>
Down's Syndrome	
Tumours	
Angioedema	
<i>Bijadosha</i>	

COLOUR^{[6][7]}

Normal Colour – Greyish Red

Discolouration is mostly due to ingestion of coloured food substances.

Eg – Eating plum fruit makes tongue violet.

Pale Or White (<i>Shukla</i>)	Over nourishment (<i>Kaphadhikya</i>) Anemia (<i>Pandu</i>) Leukoplakia Excessive Furring Pneumonia Centrally coated (enteric fever)
Bright Red (<i>Arakta</i>)	State of increase Pitta (<i>Pittadhikya</i>) Fatal involving tongue (<i>Jivhak Sannipatajwara</i>) Acute glossitis (<i>Pittaj Jivhakantak</i>) Typhoid (Red at tip)
Scarlet Red tongue	Niacin Deficiency
Dark Red Tongue	Polycythemia Riboflavin Deficiency
Bluish (<i>Neelabh</i>)	Alcohol Intoxication (<i>Asadhya Madatyaya</i>) Peripheral Circulatory failure (<i>Visuchika Asadhya Lakshan</i>) Ingestion Of Black plum Fruit Central Cyanosis
Blackish Red or Purple (<i>Krushna Raktabh</i>)	State of increase of all three doshas (<i>Trayodoshadhikya</i>) Fatal Fever (<i>Sannipatajwara</i>) Anemic glossitis (Beefy tongue) Polycythemia Riboflavin deficiency
Yellowish (<i>Pitabha</i>)	Jaundice (<i>Kamala</i>) Acute Hepatic Necrosis (Yellowish furr)
Blackish (<i>Krushnabh</i>)	Iron

	Bismuth Melanoglossia Actinomycosis Penicillin Injections Tobacco chewing (<i>Tamalpatra Charvanat</i>) Charcoal Toothing (<i>Dagdhakashtha Dantsevnat</i>)
Brownish(<i>Tamrabh</i>)	Uremia Acute Liver Necrosis Chocolate, Liquorice chewing (<i>Yashtimadhu Charvanat</i>)
Orange Red	Poly Arthritis Nodosa After Antibiotics
Dark Brown Patches	Addison's Disease

Pigmentation^[8]

Abnormal Pigmentation – Brownish Black tongue

Addison's Disease

Nelsons Syndrome

Peutz- jegher's Syndrome

Chronic Cachexia

Malnutrition

Dryness of Tongue^{[9][10]}

Dehydration

Coma

Haemorrhage

Atropine / Belladonna

Mouth breathing

Sjogren's Syndrome

Uremia

Vata vridhhi

Surface^[11]

Atitanu (Smooth or Bald tongue) -

Kapha vitiation

Iron deficiency anemia

Pernicious anemia

B complex deficiency

Malabsorption

Sacred tongue –

May be traumatic

Secondary to ulcer

From tongue biting as in Epilepsy (*Abhighataj*)

Mushroom like Tongue

Sore tongue with whitish slough in acid poisoning

Movements^[12]

Slow rhythmic tremors – *Kampvaat* (parkinson's Disease)

Backward and forward Movements – *Adhijivhika*

Lizard Tongue – (Jack-in-the-Box) or (Watchspring tongue)

Jivha Vepan- Rheumatic Chorea

Trushananirodhaj Daha

Deviated Tongue - Hypoglossal Nerve

(Also seen Wasting of half of tongue)

Malignant Infiltration, Severe ulceration (*Mukhapak*)

Facial Paralysis (*Ardit / Pakshaghat*)

Stabdha Jivha (Immobile tongue) – Bilateral Lingual Paralysis, Bulbar Palsy, Sluggish or slow protrusion in mental retardation, increasingly slow movements in *Mysthenia gravis*, *Jivhastambh*

Spastic Tongue^[13] – Pseudobulbar Palsy

Furred Tongue (*Liptajivha/Updehajivha*)^[14]– All febrile conditions especially Typhoid, heavy smoke, poor oral hygiene, *Amlapitta*, *Sannipataj Jwara*.

Fasciculations (Fibrillation)^[14]

Fasciculation within the tongue when lying in oral cavity is the feature of Motor Neuron Disease and also seen in *Syringomyelia*.

Ulcer on The Tongue^[15]

SINGLE	MULTIPLE	RECURRENT
Tuberculosis	Apthous Ulcer	Apthous Ulcer
Carcinoma	Herpes	SLE
Syphilis	Secondary syphilis	Coeliac Disease
Dentle irritation	Pemphigus	Behcet Syndrome
	Chickenpox	Lichen Planus
	Vitamin B deficiency	Pemphigus
		Neuropenia

Some Other Conditions of Tongue**Fissured Tongue^[16]**

Down's Syndrome

Vitamin B Deficiency

Acromegaly

Congenital Malformation

**Geographic Tongue^[17]**

Asymptomatic Inflammatory condition with rapid loss and regrowth of filiform papillae leading to denuded red patches 'wandering' across the surface of tongue - No clinical significance.

**Hairy Leukoplakia^[18]**

It is caused by EB virus and is typically seen in the lateral margins of the tongue and is diagnostic of AIDS.

**Hairy Tongue^[19]**

Formation of keratin layer prior to desquamation can result in elongation of filiform papillae over the medial dorsal surface of tongue.



Median Rhomboid Glossitis^[20]

It is red due to depapillation of rhomboid area at centre of dorsum of tongue with associated candidiasis. It is maker of immune deficiency disorder.



Bald Tongue^[21]

It is due to diffuse atrophy of papillae. It is commonly seen in pellagra, xerostomia, B₁₂ deficiency disorder.



Some Conditions Explained In The Ayurved Samhitas

Acharya Vagbhat mentioned that if a child have any discomfort in the chest then the child bites his or her own tongue.^[22]

<i>Skandapsmar Graha</i> ^[23]	Child bites his or her own tongue
<i>Shwana Graha</i> ^[24]	Child bites his or her own tongue
<i>Shakuni Graha</i> ^[25]	Child got wound at tongue and soft or hard palate.
<i>Shushkarewati Graha</i> ^[26]	Child gets pit on middle of tongue

In *Prameha poorvarupa* there is thick coating on the tongue.^[27]

DISCUSSION

As we all know for proper diagnosis of disease physician should be skillful in history taking and have command on examination. A skillful history taking and proper examination leads to

the correct diagnosis of disease. Maximum diseases are diagnosed by their typical features. Tongue also have some typical feature as explained earlier. Analysis of tongue is a part of *Ayurveda* diagnosis complementary with pulse, nails, eyes, face etc. As we all know tongue is the mirror of digestive system because it reflects the condition of inner organ of body. Still tongue is the most neglected part of zone of interest. It is mandatory to examine the tongue during the routine physical examination of patient. Tongue should be examine in day light to avoid wrong diagnosis. From this various kinds of conditions physician diagnose the health status of an individual. We can standardize the technique viz. examination by using different hardware tools, by computer aided image enhancement of tongue which is the need of present era.

CONCLUSION

Tongue is the mobile motor organ of oral cavity. It performs the various function like deglutition, speech, food bolus formation. Any impairment in GIT reflects on tongue and it helps to diagnose different diseased of conditions body. There are N numbers of diseases we can diagnose form tongue examinations so we can say that tongue examination is the important tool for the diagnosis.

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