

Diagnostic Relevance of *Jihwa pareeksha* in *Hridroga* with Special Reference to Ischemic Heart Disease: A Case series

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ABSTRACT

The tongue is considered a mirror of overall health and therefore serves as an important diagnostic tool. *Acharya Yogaratnakara* highlighted the importance of examining eight key factors, collectively known as *Astha Sthana Pareeksha*, with *Jihwa Pareeksha* (tongue examination) being particularly significant. Each region of the tongue is believed to reflect the condition of specific internal organs. *Hridroga* is characterized under *Samanyaja Vyadhis* in the *Charaka Samhita*, while the *Hridroga* is considered one of the *Trimarmas* and is also included among the *Dashapranayatanas*, underscoring its vital importance. Although modern clinical practice commonly focuses on *Jihwa Liptata* (coating) or *Aliptata* (absence of coating), other parameters such as *Varna* (colour), *Pramana* (size), *Akruthi* (shape), *Chalana* (movement), *Thala* (surface), *Upalepa* (coating), *Sphutita* (fissure), and *Kleda* (moisture) also provide valuable insight and play a crucial role in the diagnosis and analysis of diseases..

Key words: Jihwa pareeksha, Hridroga, IHD.

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INTRODUCTION

“*Rogamadhau pariksheth thada anatharam aushadham*”¹, is the verse from the classical text that explains the importance of diagnosis before treatment. Diagnosis plays a central role in medical science, and different systems of medicine adopt various approaches to it. In Ayurveda, the concept of *Trisutra-Hetu*(cause), *Linga* (Symptoms), and *Aushada*(treatment)-guides understanding and management of disease. Of these, *Hetu* and *Linga* are related to diagnosis, while *Aushada* pertains to treatment. The term *Pareeksha* in *Ayurveda* corresponds to concepts of diagnosis in modern medicine and is broadly classified into *Roga Pareeksha* (examination of disease) and *Rogi Pareeksha* (examination of patient). *Rogi pareeksha* includes *Nidana panchaka* and *Roga pareeksha* is the first step in *chikitsa* which includes various sets of *pareeksha* like *Trividha pareeksha*, *Panchavidha pareeksha*, *Asta*

sthana pareeksha, *Dasavida pareeksha*, etc. Among these *Asta sthana pareeksha* is the methodology of diagnosing the *vyadhi avastha*. This includes the examination of *Nadi* (pulse), *Mala* (stool), *Mutra* (urine), *Jihwa* (tongue), *Shabda* (speech), *Sparsha* (touch), *Drik* (vision), and *Akruthi* (body build). Among these, *Nadi Pareeksha* and *Jihwa Pareeksha* hold special significance, with reference found in many ancient medical traditions across different regions.

In the context, *Jihwa Pareeksha* is discussed in detail. It involves assessing an individual's health and disease condition through careful examination of the tongue.

This Diagnosis method is well documented in ancient Indian classical texts and is also recognized in traditional medical systems of china, Greece, and Korea.

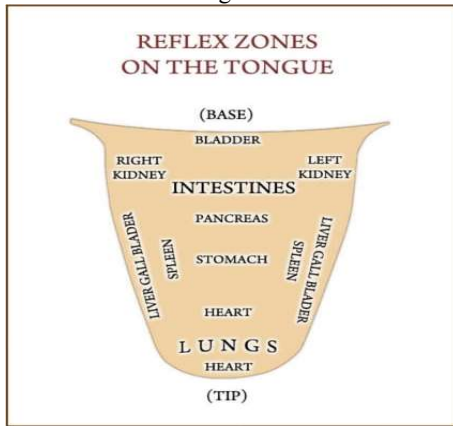
Vikruthavastha of *Jihwa* in many disorders like *Jihwa Karkashata*³, *Jihwa Nirgama*³, *Jihwa shvayathu*⁴, *Jihwa*

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shosha⁵, Jihwa upalepa⁶, Jihwa Sthambha⁷ and Jihwa Nirodha⁸ stated by Acharya Charaka.

Reflex Zones on the Tongue⁹: -

Chinese medicine explains the concept of reflexology as the relevant diagnostic technique. In the Approach, the entire dorsal surface of the tongue is mapped to reflect different internal organs of the body. These regions are correlated with the locations of *Shareerika dosha*. For Instance, *Kapha Sthana* organs such as the heart and lungs are represented at the Tip of the Tongue; *Pitta Sthana* organs – Including the stomach, spleen, liver, gallbladder, and pancreas- are reflected in the middle region; and *Vata Sthana* organs like intestine, kidney, and bladder are represented at the base of the tongue. Any abnormality observed in these specific areas of the tongue may indicate a corresponding dysfunction in the related organs.



Hridroga (heart disease) is a major cause of mortality in India, and cardiovascular diseases account for nearly one-third of deaths globally¹⁰. Among these, ischemic heart disease (IHD) is the most prevalent form¹¹.

Asia witnessed a significant increase in IHD burden caused by Hi-Tem, with 88,450 (95% UI: 15,815-188,816) deaths and 2,112,025.42 (95% UI: 456,758.65-4,325,643.47) disability-adjusted life years in 2021. Over the past 3 decades, the burden increased annually by 1.63% (95% CI: 1.25%-2.01%) in age-standardized mortality rate and by 1.60% (95% CI: 1.21%-1.99%) in age-standardized rate of disability-adjusted life years. Notably, South Asia bore the heaviest burden, whereas high-income Asia Pacific had the lightest. Men and older persons consistently faced a higher IHD¹². So, it is needed to review the concept of *Hridroga* and its Diagnosis, according to *Ayurvedic* perspectives with its present updates.

CASE PRESENTATION: -

[Informed consent was obtained from the patient prior to the case presentation]

1}A Subject, Aged 75 years, by Occupation Ex-Military Officer, known diabetic on medication, presented with h/o of chest pain from one hour on 20-12-2025 associated with 2 episodes vomiting.

ECG done revealed sinus rhythm, incomplete RBBB, T inversions in IaVL V4-6.

Trop-I - Elevated.

2D echo -Revealed RWMA, Concentric LVH, depressed LV Function, LVEF 35%, Mild MR/TR, Grade 1 LVDD.

H/o- Chronic Smoking in the past 55 years, Cigarette, 12 per day,

Alcohol – For 50 years 90ml per day (Brandy)

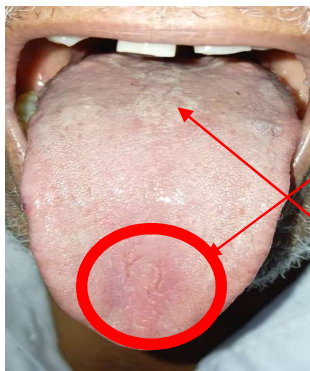
Diet – mixed, Sarvarasa satmya, non-Veg twice a week

Sleep – Disturbed 3-4 hours due to Family issues, No day sleep

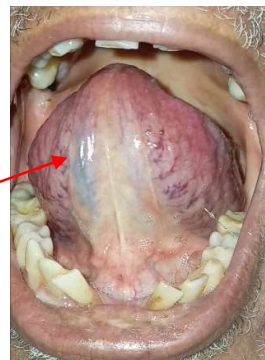
Urine- 7-8 times/day & 3-4 times/Night

Stool – Constipated weekly twice.

Suppression of Natural urges – present, due to work.



Fissures – Present – Anterior 1/3rd – vertical medial of tongue.
Vein Engorgement – Present
Coating – Thin layered white coating at posterior part on tongue



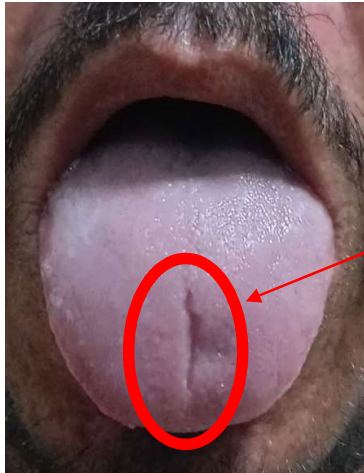
On Tongue Examination:

- Size of the tongue – class 3 (Mallampatti Airway assessment)
- Shape of tongue – U Shaped
- Color of the tongue – Pale Pink to Pink
- Coating of the tongue – Thin Layered white coating present at the Posterior part of the tongue.

- Texture of the tongue - Coated area – Smooth
- Uncoated Area – Rough
- Fissures – Present – Anterior 1/3rd – vertical medial of tongue
- Papillae – Normal
- Dryness Scale – CODS Scale – Moderate
- pH of Tongue – 7 (PH indicator)
- Saliva – Present, No sticky

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Suppression of Natural urges – present due to work



Fissures – Present – Anterior
1/3rd– Deep vertical Single
Fissures



On Tongue Examination: -

Size of the tongue – class 4 (Mallampatti Airway assessment)

Shape of tongue – U Shaped

Color of the tongue – Pink

Coating of the tongue – no.

Texture of the tongue - Coated area – Rough

- Uncoated Area – Rough

Fissures – Present – Anterior 1/3rd– Deep vertical Single Fissures,

Papillae – Color

Dryness Scale – CODS Scale – Moderate

PH of Tongue – 8 (PH indicator)

Saliva – Present, No sticky

Under surface of tongue – Vein Engorgement – Absent

Pallor – absent

Range of Movement – Possible

Findings – Fissures – Anterior 1/3rd– Deep vertical medial Single Fissure

Case 4: -

A Subject, 52-year-old male, by Occupation IT Employee, presented with c/o chest pain in the past 1 day (21-10-2025), Associated with Obesity k/c/o – T2DM sine 10years.

ECG – Sinus rhythm, poor R Progression in precordial leads. Cardiac Biomarkers were elevated. 2D echo shows RWMA, depressed LV function, Ef-40%, grade 1 LVDD. CAG done on 21-10-2025.

Diet – mixed, Sarvarasa satmya, nonveg weekly twice, Untimely food

Lack of Exercise.

Sleep – Disturbed sleep due to work, (Night Shifts), day sleep- 5 hours' sleep

Urine- 3-5 times/day & 1 times/Night

Stool – Constipation once a week

Suppression of Natural urges – present due to work

Exercise- lack of Exercise

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Fissures – Present – Anterior 1/3rd–1 vertical medial
Fissures, 3 Horizontal fissures
Papillae – Colored
Dryness Scale – CODS Scale – Moderate
PH of Tongue – 7 (PH indicator)
Saliva – Present, No sticky
Under surface of tongue – Vein Engorgement – Present
– Pallor – absent
Range of Movement – Possible
Findings – Fissures- Anterior 1/3rd– 2-3 vertical medial
Fissures
-Coating-Thin layered white colored overall except anterior
1/3rd middle of tongue.

DISCUSSION: -

Angina is referred as “*Hrit Shoola*” which literally means Chest pain¹³.

Srotorodha in the heart indicates the presence of Atherosclerosis i.e. *Dhamani Praticaya* leading to reduced blood supply to the heart.

The aggravated and vitiated *Vata Dosha* leads to spasm of coronary arteries which results in temporary ischemia of heart precipitating severe precordial pain.

The important predisposing factors of it are the thickening of Coronary Arteries due to vitiated *Kapha Dosha* (Atherosclerosis) or *Pitta Dosha* (Inflammatory) and abnormal quality of *Rasa* and *Rakta Dhatu* (Dyslipidaemia). Atherosclerosis increases with the increase in lipid concentration due to consumption of fatty and Unctuous diet¹⁴. Measures in Sr.total cholesterol and Low-density cholesterol (LDL) concentration.

In obesity, fat deposition especially occurs on abdomen leading to its enlargement. Central obesity is a risk factor for diabetes mellitus, hypertension and coronary artery disease. *Ayurveda* also says that obesity can be hereditary. Diabetes is the host of many diseases: The *Kapha* promoting diet consisting of sweet, oily food stuff mentioned in *Ayurveda*, is rich in harmful cholesterol, saturated fat and trans fat¹⁴. Insulin resistance is associated with obesity and physical inactivity. Type 2 diabetes is a potent risk factor for atherosclerosis and coronary artery disease. The incidence of Type 2 diabetes and related ischemic heart disease is high in peoples from Indian subcontinent and other ethnic groups.

As per *Ayurveda*, physical inactivity leads to obesity, and exercise is best for reducing the weight¹⁵. Lack of physical activity doubles the risk of coronary artery disease and stroke. Exercise also improves insulin sensitivity in Type 2 diabetic patients. As per *Ayurveda* those who consume oily and high calorie food daily, should exercise daily¹⁶.

Ayurveda says that consumption of new alcoholic preparations leads to deposition of extra fat in the body. Excessive consumption of alcohol is associated with obesity, diabetes, hypertension and cerebrovascular disease¹⁷.

According to '*Yoga Ratnakara*' was the first to notice the harmful effects of tobacco smoking on heart. The composer of '*Yog Ratnakara*' had first mentioned the ill effects of tobacco on human health, and he particularly mentioned

that smoking of tobacco affects the heart. □□□□□□ ...
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□ Y.R.

The mental stress elevating causes like excessive worry (*Ati chinta*), sadness (*Shoka*)¹⁹ anger (*Krodha*), anxiety (*Bhaya*), depression (*Vishada*), and mentioned in *Ayurveda* have impact on coronary artery disease¹⁸.

Anger (*Krodha*) shoots up blood pressure as a fight response by secreting vasoconstrictor hormones like adrenaline. Acharya Charka had mentioned that anger instantly leads to vitiation of Pitta in heart¹⁹. Anxiety (*Bhaya*) increases heart rate by sympathetic stimulation of heart.

Ayurveda states that depression leads to diseases and sadness leads to emaciation of the body²⁰.

Suppression of Natural urges like *Adhovata* (Flatus), Mala (defecation) leads to constipation, and constipation is one of the leading causes of cardiovascular disease. Women with moderate and severe constipation experienced more Cardiovascular event (14.2 and 19.1 /1000 per year respectively compared with no constipation (9.6/ 1000-person year). Constipation is marker for cardiovascular risk factor and increased cardiovascular risk.²¹

Cardiovascular is implicated in the development of atherosclerosis potentially through altered Gut Micro-biota. It's association with cardiovascular disease. Patients with constipation had 12 % higher all causes of mortality, 11 % higher incidence cardiovascular disease and 19 % higher incidence of Ischemic heart disease²².

CONCLUSION: -

Jihwa Pareeksha is an important diagnostic tool in *Ayurveda* that reflects the internal state of *dosha, dhatu*, and *Agni*. In the present case series evaluating the diagnostic relevance of *Jihwa pareeksha* in *Hridroga* with special reference to Ischemic Heart Disease, several tongue changes were observed among the patients. Common findings included variations in the tongue color, coating, texting, and moisture. Notably, Fissures at the anterior one-third of the tongue were observed as a frequent feature among many cases, suggesting a possible association with cardiac pathology.

These findings indicate that changes in the tongue may reflect underlying systemic disturbances related to the pathogenesis of *Hridroga*. *Jihwa Pareeksha*, being a simple, non-invasive, and cost-effective examination method, may aid in the clinical assessment and early recognition of imbalances associated with cardiovascular disorders when used alongside other *Ayurvedic* diagnostic parameters and Modern investigation methods.

However, as the present study is limited to a small number of cases, further large-scale studies are required to establish stronger clinical correlations and validate the diagnostic significance of specific tongue features—such as fissures in the anterior one-third—in patients with Ischemic Heart Disease. Integrating classical *Ayurvedic* diagnostic approaches with contemporary clinical research may enhance the understanding and applicability of *Jihwa Pareeksha* in the diagnosis of *Hridroga*...

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