



Review Article

SWA-ANGULI PRAMANA OF SHIRA (HEAD) IN ASTHI-SARA-PURUSHA (PERSON HAVING ENRICHED BONE TISSUE)

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ABSTRACT

Ayurveda is an ancient Indian holistic medicine system focusing on promoting health by maintaining body balance. It is gaining relevance in today's integrative medicine landscape for treating chronic diseases. Key Ayurvedic concepts like Shira Pradesha, Maha Shira, and Asthi-Sara-Purusha contribute to individual health assessment. Methods: This review examines the applicability of Ayurvedic anthropometric methods, particularly Swa-Anguli Pramana, in current clinical practice. It includes discussions on validation studies and comparative analyses with modern techniques. Results: Swa-Anguli Pramana shows consistent personalized diagnostic potential across different demographic groups. Challenges exist regarding discrepancies with modern measurements and the need for standardization. Discussion: Integrating Ayurvedic measurements with modern metrics is likely to be valid and acceptable in contemporary healthcare. There is growing interest in traditional measurement methods for providing personal health information aligned with the holistic approach of Ayurveda. Conclusion: Ayurvedic anthropometric methods, especially Swa-Anguli Pramana, have potential for individualized health assessment. Standardization and validation are vital, and future research should focus on establishing a standardized integrative framework.

INTRODUCTION

Ayurveda is a complete scientific medicinal system indigenous to India. The term Ayurveda means 'science of life', which consists of two Sanskrita words. Ayu (life) and Veda (knowledge or science) [1,2,3]. From 3000BC, Ayurveda has matured through different historical periods and has gained recognition as a complete medical system with sound philosophical and experimental foundations [4]. Despite the decrease in utilization, Ayurveda is gaining its importance back in healthcare to complement modern pharmacology. This holistic approach to healing should further encompass other physical, mental, and emotional aspects of health [5]. Scientific insights and recognition due to establishment of WHO Global Centre for Traditional Medicine and Ministry of AYUSH



shall only make it a reliable service, which would try to reach a larger population ^[6]. In fact, some of the peculiar aspects associated with Ayurveda, such as the approach to *Swastavritta* (health promotion) and the goal for preventive healthcare, can be appreciated as an option for changing global health status in taking steps towards public health effectively. In modern health care, it is slowly becoming recognized in terms of an integrative approach to complementing the existing approaches for treating chronic diseases and lifestyle disorders and preventive care. Ayurveda is now considered important in modern healthcare scenarios, especially in the case of integrative perspectives to complement ^[7].

Explanation of *Shira Pradesha (Head Region)* in Ayurvedic Context

In the Ayurvedic context, the head region is called *Shira Pradesha*, meaning the head region, which is considered the *Uthamanga*, meaning the best organ of the body. It is superior to other body parts [8]. The concept of *Maha Shira* (big head), that is, the large head, gives special importance to the head part, especially the anatomical structures like *Shankha*

(temple region) Marma on the surface of the body, which plays a very important role in diagnosis and particularly in treating surgical diseases Furthermore. Asthi-Sara-Purusha refers to the essence of bone in the human body, correlating to the functional capacity of bones and their properties, functions, and structure. So, Avurvedic treatments like administration of *Muktashuktipishti*, an Ayurvedic mineral formulation made from rare purified freshwater pearl paste infused in rose water, showed promising results regarding increasing bone strength and addressing issues like hair fall, nail breakage, tiredness, pain in bony areas, etc., highlighting the holistic approach that Ayurveda offers towards health and well-being [10].

It is also mentioned in Ayurveda that the *Shira Pradesha* is the head region in which a proper place of *Prana* (life) is also related to survival and thus very important to be healthy in all aspects. *Maha Shira* refers to the bigger or the significant structures of the head, including vital anatomical as well as functional structures. *Asthi-Sara-Purusha* (person having enriched bone tissue) is a concept indicating robust structural and skeletal strength, with a predominance of the element bone tissue (*Asthi Dhatu*) in an individual [11].

Importance of *Swa-Anguli Pramana* (measurement based on the width of one's own fingers) in Ayurvedic Assessment

Swa-Anguli Pramana (measurement based on the width of one's own fingers) is a traditional Ayurvedic method applied in measuring numerous body parts. It gives personalized measurements of persons and differs from other modern methods in anthropometry, which give generalized measurements.

Personalized Health Assessment: *Swa-Anguli Pramana* allows an individualized measurement that personal differences in body proportions can make more accurate than measured with standardized modern metrics [12].

Clinical Utility: This is applied in *Dashvidha Pariksha* for the assessment of the *Prakruti* and *Bala* of the subjects for planning treatment accordingly [13].

Correlation of Height: There is a correlation of *Swa-Anguli Pramana* with height, and it provides the indication of being valid measurement for body proportion [14].

Less Consistent across Demographics: *Swa-Anguli Pramana* is a method of anthropometric assessment and is less consistent than standard measurements taken following gender, race, and region [15].

Historical Relevance: *Swa-Anguli Pramana* (measurement based on the width of one's own fingers) has been referred to in classical Ayurvedic

texts by *Acharya Charaka* and *Sushruta*, pointing to its long-term relevance in health assessments [16].

This gives a person-specific measure so that physical characteristics and likely imbalances can be judged accurately. This method is of great importance in assessing *Shira Pradesha* (head region), providing insight into the constitution and potential health problems that an individual may have [17].

Historical and Theoretical Foundations

A. Historical Background of Ayurveda and Its Principles

Ayurveda system has had a very rich historical background and foundational principle, which has been responsible for its growth and practice over thousands of years in ancient India. Its holistic approach to health and well-being is based on an intimate understanding of the human being's body, mind, and spirit. Tracing its origin from the Atharva Veda, which is one among the four Vedas, Ayurveda is mentioned along with various diseases and their treatments. Its systematical evolution occurred from the 6th century BCE till the 7th century CE, known as Samhita period, during which classical texts including Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya Samhita were written [18].

Ayurveda is based upon the philosophy of *Bala*nce in three primary bodily *Doshas*: *Vata* (nervous system), *Pitta* (digestive system), and *Kapha* (structural body). Health is a state of *Bala*nced condition of these *Doshas*, which mean functional energies in nature, and illness occurs from their imbalance. Mental health is further divided into three *Gunas*: *Sattva* (goodness), *Rajas* (activity), and *Tamas* (inertia); they also require being *Bala*nced for overall well-being [19].

At the same time, there is an increasing realization of Ayurveda by modern biology and medicine. It may help in increasing the clinical understanding and practice of Ayurvedic concepts through current scientific validation also leading to more effective health interventions which were otherwise not possible [20]. Not only has Ayurveda influenced traditional systems of medicine in other countries, including Traditional Chinese Medicine and Unani as well, today it is also being incorporated into contemporary healthcare practices worldwide. In this continuous evolution the scientific validation and standardization of Ayurvedic drugs/modality so; as to be streamlined in accordance with contemporary healthcare systems has been a major concern [21].

Ayurveda enjoys a venerated status as an ancient and 'wholistic' modality of health-care. Moreover, its holistic nature stretching to principles of balance and harmony in life; natural remedies practiced long before they were popular among our people or scientific communities still maintain an array

of potential for alleviating contemporary health concerns.

B. Concept of *Shira Pradesha* and *Maha Shira (Big Head)* in Classical Avurvedic Texts

Maha Shira (big head); Large emphasis has been given in the classical texts on these structures which include entities like brain, skull and sense organs due to their major importance for maintaining health and well-being [22].

The ancient theories and practices in Ayurveda have a deep foundation for the ideas of *Shira Pradesha* (head region) and *Maha Shira* (Big head) amidst *Asthi-Sara-Purusha* (person with strong bones), including other *Sara Purusha*, as described by Ayurvedic texts. The concepts are important to appreciate how people are grouped and characterized according to Ayurveda's standpoint.

Avurveda refers to the brain as Trimarma one of three chief vital locations that also includes heart (Hridava) and urinary bladder (Basti). The head is perceived as the seat of Prana also known as life essence, and all the sense organs. It is extremely harmful when injury occurs to any person's head because this interrupts necessary activities [23]. People with Asthi Sara have strong bones and skeletal structures. Consequently, these people have big heads Maha Shira (big head) that are well-formed which suggests that they are healthier and have a stronger body build. This shows their general physical strength and vigor [24]. The word *Uttamanga* means the best part of the body; thus it describes a structure called Shira, through which runs vital structure plus the senses organs to mention but a few. These combinations are crucial in ensuring one's healthy state altogether. It is thus apparent that their immense strength comes out of Asthi Sara nature of their heads [25]. With reference to overall health status or management of diseases. Shira Pradesha. philosophically speaking, has been prioritized as a critical region in Ayurveda. The emphasis placed on organ in Ayurvedic texts underpins its fundamental role in maintaining life and consciousness thus making it indeed an area of focus in medical practice [26].

C. The Significance of *Asthi-Sara-Purusha* in Ayurvedic Diagnosis and Treatment

Asthi-Sara-Purusha is the name for a category of people, who according to Sara concept have more dominant bone strength [27]. Strongly built bodies with big joints, teeth and nails are among the features associated with Asthi-Sara. They also have immense stamina and tolerability. These features are vital in determining their health condition as well as prescribing targeted therapies [28]. The examining of Dhatu Sarata (tissue excellence) including Asti-Sara is part of Dashavidha Pariksha (tenfold examination)

described in classical Ayurvedic texts. The test helps to identify how much the tissues are robust and full of vitality that is very important for tailored treatment programs [29]. Different aspects such as poor bone composition can significantly affect overall health outcomes. Good bone quality or *Asthi Sara* means that one is less vulnerable to fractures or other bone problems. However, poor bone quality may indicate higher chances of having say osteoporosis among others [30].

The concept of *Asthi-Sara-Purusha* (person having enriched bone tissue) plays a crucial role in Ayurvedic diagnosis and treatment, offering insights into the individual's bone health and guiding personalized therapeutic interventions. By assessing the quality of bone tissue, Ayurvedic practitioners can devise effective treatment plans that enhance overall health and prevent bone-related ailments.

D. Interpretation of the Pervasiveness of *Swa-Anguli Pramana* in Contemporary Ayurvedic Practice

The meaning behind the prevalence of *Swa-Anguli Pramana* in contemporary Ayurvedic practice indicates its lasting importance. It still acts as a primary form of assessment, showing the connection between age-old traditional wisdom with today's modern healthcare requirements [31].

Research on standardizing *Anguli Pramana* for different body measurements, including the head, underscores its application in modern health contexts. Comparative studies have shown that while traditional measures often differ from modern anthropometric data, they remain relevant for individualized health assessments^[32]. Understanding the clinical significance of *Anguli Pramana* in assessing the health and strength of *Asthi-Sara-Purusha* (person having enriched bone tissue) can enhance the precision of Ayurvedic diagnostic techniques. This approach helps in identifying individuals with strong bone structures and tailoring treatments accordingly.

1. Challenges and Future Directions

Swa-Anguli Pramana (measurement based on the width of one's own fingers) is an Ayurvedic anthropometric method used for assessing various body parts based on individual finger measurements. The concepts of Shira Pradesha (head region) and Maha Shira (large head) in Asthi-Sara-Purusha (bone-dominant individuals) are critical in Ayurveda for evaluating health and personality traits. Understanding the challenges and future directions for the pervasiveness of these measurements in healthy individuals is essential for their practical application and scientific validation.

A. Challenges in Modern Application

Lack of Standardization: The traditional measurements like *Swa-Anguli Pramana* (measurement based on the width of one's own fingers) often show significant variations when compared to contemporary anthropometric standards, leading to questions about their validity in the present era [33].

Evolutionary and Lifestyle Changes: Modern lifestyle and evolutionary changes have led to alterations in body proportions, which may not align with ancient measurements [34].

B. Scientific Validation:

Need for Revalidation: The traditional measurements require revalidation through systematic scientific studies to ensure their applicability and accuracy in contemporary contexts [35].

Comparative Studies: Studies comparing traditional Ayurvedic measurements with modern anthropometric techniques are essential for establishing a standardized method that integrates both approaches.

C. Integration with Modern Metrics

Anthropometric Consistency: Research indicates that while Ayurvedic measurements provide valuable personalized data, they should be integrated with modern metrics to enhance their reliability and consistency across diverse populations [28].

D. Educational and Clinical Applications:

Incorporation in Medical Curriculum: Ayurvedic measurements should be incorporated into medical education to promote their understanding and application in clinical practice, ensuring a holistic approach to patient care.

Use in Personalized Medicine: These measurements can enhance personalized medical treatments by considering individual variations, which is a cornerstone of Ayurvedic practice [21].

The traditional Ayurvedic measurements like *Swa-Anguli Pramana* (measurement based on the width of one's own fingers) for *Shira Pradesha* (head region) and *Maha Shira* (big head) present unique challenges and opportunities in modern healthcare. Revalidation, integration with modern metrics, and incorporation into clinical practice are essential steps for their widespread acceptance and application.

CONCLUSION

Thus, the review study of *Swa-Anguli Pramana* as one of the primary methods applied in *Ayurveda* helps in understanding its importance and problems occurring in practice. It consequently confirms the applicability of Ayurvedic standard measurement in the present-day culture and especially, is useful to decide *Shira Pradesha* (head region) and *Maha Shira*

(big head) for *Asthi-Sara-Purusha* (person having enriched bone tissue).

First, in the review study, it is indicated that *Swa-Anguli Pramana* (measurement based on the width of one's own fingers) is employed consistently and frequently for evaluating the dimensions of *Shira Pradesha* (head region), which testifies to the diagnostic usefulness of the writing. Though it deviates from today's anthropometric measurements, this system is more beneficial for health evaluations focusing on individuals, which is considered as integration in Ayurveda.

Such studies stress on the fact that the efficacy of traditional techniques of measurements like Swa-Anguli Pramana (designed on the breadth of one's fingers) has to be scientifically tested and quantified. Live connection to current standards and other comparative works is essential for achieving the base for the subsequently developed unification of traditional learning and the essential quantitative parameters of contemporary healthcare. Moreover, enlarging the application of Ayurvedic measurements in the process of medical education will allow to familiarize with them and applied in practice to improve the individual approach to patients. Suggestions for Ayurvedic assessment further ahead and improvements in assessment methodologies are as following: Revalidation of the traditional comparative measurements. studies with contemporary techniques, and incorporation of the assessment in medical syllabus and the practice routines of clinicians. Solving these issues will help to promote the it use of traditional Avurvedic measurements in today's world's availing the health care system and promote a holistic approach to health.

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