

# Ayurvedic Concept of Prakriti and Its Correlation with Anatomical Variability: A Scientific Review

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## ABSTRACT

*Sharir Rachana* in *Ayurveda* emphasizes not only the structural organization of the human body but also individual variations in anatomy and physiology. The concept of *Prakriti* represents an individual's inherent constitutional makeup determined at the time of conception and remains constant throughout life. Classical *Ayurvedic* texts describe *Prakriti* as a determinant of body structure, organ dominance, functional capacity, disease susceptibility, and therapeutic response. In modern medical science, increasing attention is being given to anatomical variability, personalized medicine, and genotype-phenotype correlations. This review aims to analyze the *Ayurvedic* concept of *Prakriti* and correlate it with anatomical variability described in contemporary anatomy and biomedical sciences. Understanding *Prakriti*-based anatomical differences is a current need to support personalized healthcare, predictive medicine, and integrative anatomical education. Scientific interpretation of *Prakriti Sharir* may provide a foundational framework for individualized diagnosis, prevention, and treatment strategies.

**Keywords:** *Prakriti, Sharir Rachana, Anatomical variability, Personalized medicine, Ayurveda, Constitution*

## INTRODUCTION

Human anatomy is not uniform across individuals. Modern anatomy acknowledges variations in body build, organ size, vascular patterns, musculoskeletal proportions, and functional capacity.<sup>4</sup> However, classical anatomy texts often describe an “average” human body, leaving limited scope for individual variability.

*Ayurveda*, through the concept of *Prakriti*, recognized individual anatomical and physiological differences thousands of years ago. *Acharya Charaka* describes *Prakriti* as the unique constitution formed by the dominance of *Doshas*—*Vata*, *Pitta*, and *Kapha*—at the time of conception.<sup>1</sup> These constitutional types influence not only physiological functions but also structural characteristics of the body, which forms the basis of *Prakriti*-based *Sharir Rachana*.<sup>2,3</sup> In the era of personalized and precision medicine, revisiting *Prakriti* as a scientific explanation for anatomical variability is a significant and timely requirement.<sup>6</sup>

### Aim and Objectives

#### Aim

To review the *Ayurvedic* concept of *Prakriti* and correlate it with anatomical variability recognized in modern anatomy and biomedical sciences.

#### Objectives

1. To analyze classical *Ayurvedic* descriptions of *Prakriti*<sup>1–3</sup>
2. To study *Prakriti*-based anatomical features described in *Sharir Rachana*<sup>2,3</sup>
3. To correlate *Prakriti* with modern concepts of anatomical variability<sup>4,5</sup>
4. To highlight the clinical and educational relevance of *Prakriti*-based anatomy
5. To establish *Prakriti Sharir* as a foundation for personalized healthcare<sup>6</sup>

### Concept of Prakriti in Ayurveda

The term *Prakriti* is derived from “*Pra*” (before) and “*Kriti*” (creation), meaning the original or innate constitution.

*Acharya Charaka* defines *Prakriti* as:

“*Doshanam prakrtirucyate*” (*Charaka Samhita, Vimana Sthana 8*)<sup>1</sup>

*Prakriti* is determined by:

- Dominance of *Doshas* at conception<sup>1</sup>

- Genetic factors (*Beeja, Beejabhaga*)<sup>2</sup>

- Maternal diet and lifestyle<sup>3</sup>

- Intrauterine environment<sup>2</sup>

Once formed, *Prakriti* remains constant throughout life.<sup>1</sup>

#### **Types of Prakriti:**

1. *Vata Prakriti*
2. *Pitta Prakriti*
3. *Kapha Prakriti*
4. Dual *Dosha Prakriti (Dvandvaja)*
5. *Tridoshaja Prakriti*<sup>1-3</sup>

Each *Prakriti* exhibits distinct anatomical and physiological features.<sup>2</sup>

#### ***Prakriti-Based Anatomical Characteristics***

##### **1. *Vata Prakriti and Anatomy***

- Lean body frame
- Prominent joints and veins
- Less muscle mass (*Alpa Mamsa*)
- Dry skin and rough texture
- Narrow chest and irregular body proportions<sup>1,2</sup>

##### **Modern correlation:**

Low BMI, ectomorphic body type, reduced muscle bulk, higher joint mobility<sup>4</sup>

##### **2. *Pitta Prakriti and Anatomy***

- Moderate body build
- Well-developed musculature
- Sharp facial features
- Warm body temperature
- Moderate fat distribution<sup>1-3</sup>

##### **Modern correlation:**

Mesomorphic build, high basal metabolic rate, increased vascularity<sup>5</sup>

##### **3. *Kapha Prakriti and Anatomy***

- Broad chest and shoulders
- Well-developed muscles
- Smooth, oily skin
- Increased adipose tissue
- Strong and stable joints<sup>1-3</sup>

##### **Modern correlation:**

Endomorphic body type, higher fat percentage, robust skeletal framework<sup>4</sup>

#### **Correlation with Modern Anatomical Variability**

Modern anatomy recognizes variability in:

- Body habitus
- Organ dimensions
- Muscle fiber composition
- Fat distribution
- Bone density<sup>4</sup>

These variations align closely with *Prakriti* descriptions.<sup>5</sup>

<b><i>Prakriti</i></b>	<b>Ayurvedic Features</b>	<b>Modern Anatomical Correlates</b>
<i>Vata</i>	Light, mobile body	Ectomorph, low muscle mass
<i>Pitta</i>	Balanced, sharp	Mesomorph, high metabolism
<i>Kapha</i>	Heavy, stable	Endomorph, high fat mass

***Prakriti, Genetics, and Personalized Medicine:*** Modern research links *Prakriti* with:

- Genetic polymorphisms
- Metabolic phenotypes
- Disease predisposition<sup>6</sup>

This aligns with precision medicine, where treatment is tailored according to individual anatomical and physiological variability.<sup>6</sup>

#### **Clinical Significance of *Prakriti*-Based *Sharir Rachana*:**

##### **1. Disease Susceptibility:**

- *Vata*: Neuromuscular and degenerative disorders<sup>1</sup>
- *Pitta*: Inflammatory and metabolic disorders<sup>2</sup>
- *Kapha*: Obesity, diabetes, cardiovascular disorders<sup>3</sup>

##### **2. Surgical and Anatomical Education:** Understanding *Prakriti* helps predict

- Tissue healing capacity
- Pain sensitivity
- Surgical risk and recovery<sup>4</sup>

##### **3. Preventive Healthcare**

*Prakriti*-based lifestyle and diet recommendations reduce disease risk.<sup>6</sup>

#### **Relevance in Contemporary Medical Science**

- Supports individualized diagnosis<sup>6</sup>
- Enhances anatomical teaching<sup>4</sup>
- Bridges Ayurveda with genomics<sup>6</sup>
- Strengthens integrative medicine models

## **DISCUSSION**

*Prakriti Sharir* demonstrates *Ayurveda*'s advanced understanding of individual anatomical diversity. While modern anatomy often focuses on population averages, *Ayurveda* emphasizes individuality.<sup>1-3</sup> Integrating *Prakriti* with anatomical variability provides a holistic and personalized approach to healthcare, aligning well with current biomedical trends.<sup>6</sup>

## **CONCLUSION**

The Ayurvedic concept of *Prakriti* offers a scientifically relevant framework to understand anatomical variability among individuals. Correlation of *Prakriti* with modern anatomical and phenotypic variations supports its role in personalized medicine and integrative healthcare. Incorporation of *Prakriti*-based *Sharir Rachana* into contemporary medical education and research can enhance patient-centred and predictive healthcare models.<sup>6</sup>

## **FUTURE SCOPE**

- Imaging-based anatomical studies based on *Prakriti*
- Genetic and epigenetic correlation research
- Integration with precision medicine
- Development of *Prakriti*-based anatomical atlases

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