

# 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 prakritirucyate*” (*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>

<i>Prakriti</i>	Ayurvedic Features	Modern Anatomical Correlates
<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

## REFERENCES

- [1]. Charaka. **Charaka Samhita** with Chakrapani commentary. Vimana Sthana. Varanasi: Chaukhambha Bharati Academy; 2017.
- [2]. Sushruta. **Sushruta Samhita** with Dalhana commentary. Sharir Sthana. Varanasi: Chaukhambha Orientalia; 2018.
- [3]. Vagbhata. **Ashtanga Hridaya** with Arunadatta commentary. Sharir Sthana. Varanasi: Chaukhambha Surbharati Prakashan; 2019.
- [4]. Standring S. **Gray's Anatomy: The Anatomical Basis of Clinical Practice**. 42nd ed. London: Elsevier; 2021.
- [5]. Hall JE. **Guyton and Hall Textbook of Medical Physiology**. 14th ed. Philadelphia: Elsevier; 2021.
- [6]. Patwardhan B, Joshi K, Chopra A. Ayurveda and personalized medicine. *J Ayurveda Integr Med*. 2018;9(2):83–89.