

VYĀDHIKṢAMATVA AND ITS CORRELATION WITH CONTEMPORARY SCIENCE

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M. D. 2nd Year, Deptt. of Rog Nidan Evam Vikriti Vigyan, R.G.G.P.G. Ayurvedic College & Hospital, Paprola, Distt. Kangra, H.P., India. DOI: <https://doi.org/10.5281/zenodo.18151488>



How to cite this Article: Dr. Rishika Chauhan^{1*}, Dr. Amritanshu Saroch², Dr. Namisha Ramotra³, Proff. Akhilesh Kumar Srivastava⁴, Dr. Ajay Kumar Shukla⁵ (2026). VYĀDHIKṢAMATVA AND ITS CORRELATION WITH CONTEMPORARY SCIENCE. World Journal of Pharmaceutical and Medical Research, 12(1), 505–507.

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Article Received on 05/12/2025

Article Revised on 25/12/2025

Article Published on 05/01/2026

ABSTRACT

The concept of **Vyādhikṣamatva**, denoting the body's natural and acquired ability to resist disease, occupies a pivotal place in Ayurvedic thought. Rather than limiting immunity to a single defensive mechanism, Ayurveda presents it as a dynamic and integrative phenomenon rooted in metabolism, tissue health, vitality, mental balance, and systemic regulation. Acharya Cakrapāṇi, in his commentary on the *Charaka Saṃhitā*, categorizes Vyādhikṣamatva into two distinct yet complementary dimensions—**Vyādhibalavirodhi** and **Vyādhi-utpāda-pratibandhaka**—which closely parallel adaptive and innate immunity in modern immunology. In contemporary biomedical science, immune competence is increasingly understood as being profoundly influenced by endocrine regulation. Hormones governing metabolism, stress adaptation, growth, sleep, and reproduction exert significant immunomodulatory effects. This article presents the classical Ayurvedic framework of Vyādhikṣamatva with authentic textual references and integrates it with modern immunological and hormonal perspectives, offering a holistic understanding of disease resistance.

KEYWORDS: Hormones governing metabolism, stress adaptation, growth, sleep, and reproduction exert significant immunomodulatory effects.

INTRODUCTION

Ayurveda defines its fundamental objective as.

“Swasthasya swāsthyarakṣaṇam, āturyasya vikārapraśamanam ca”

— preservation of health in the healthy and alleviation of disease in the sick.

Health (*svasthya*) is not merely the absence of disease but a state of dynamic equilibrium. Suśruta describes this state as.

समदोषः समाग्निश्च समधातुमलक्रियः।

प्रसन्नात्मेन्द्रियमनाः स्वस्थ इत्यभिधीयते॥

(*Suśruta Saṃhitā, Sūtrasthāna 15/48*)

Thus, balance of **doṣa**, **agni**, **dhātu**, and **mala**, along with mental and sensory well-being, forms the foundation of health.

The body's capacity to preserve this equilibrium, prevent disease, and recover from pathological insults is termed **Vyādhikṣamatva**.

Vyādhikṣamatva is therefore not a static attribute but a **dynamic functional strength**, continuously shaped by metabolic efficiency, tissue integrity, vitality, neuroendocrine regulation, and mental resilience.

Physiological Basis of Vyādhikṣamatva

Vyādhikṣamatva arises from the harmonious interaction of **Agni, Ojas, and Bala**, which together form the internal environment necessary for effective immune defense.

Agni (Digestive and Metabolic Fire)

Agni governs digestion, metabolism, tissue transformation, and energy production. Proper Agni ensures the formation of high-quality *rasa dhātu* and subsequent nourishment of all dhātus, ultimately leading to Ojas production.

यदन्नं देहधात्वोजोबलवर्णादिपोषकम्।

तत्राग्निर्हेतुराहारान्नं ह्यपक्वाद्रसादयः॥

(Charaka Saṃhitā, Cikitsāsthāna 15/5)

From a modern standpoint, Agni corresponds to **metabolic efficiency regulated by hormones such as thyroid hormones, insulin, and growth factors**, all of which are essential for immune cell proliferation and function.

Ojas (Vital Essence)

Ojas is the supreme essence of all dhātus and represents the physical substrate of vitality, immunity, and endurance.

सर्वधातुसारमोजोऽभिधीयते।

(Suśruta Saṃhitā, Sūtrasthāna 15/27 – Cakrapāṇi)

In contemporary terms, Ojas may be correlated with **immune reserve, systemic resilience, and neuroendocrine balance**, all of which are profoundly influenced by hormonal stability.

Bala (Strength)

Bala reflects the body's capacity to withstand disease and stress. It represents the functional manifestation of well-nourished tissues, adequate Ojas, efficient Agni, and balanced endocrine regulation. Clinically, Bala corresponds to **immune competence, stress tolerance, and recovery capacity**.

Hormonal Regulation of Vyādhikṣamatva (Integrative Perspective)

Modern physiology recognizes that immune function does not operate independently but is closely regulated by the **neuro-endocrine-immune axis**. This understanding aligns closely with the Ayurvedic view that Vyādhikṣamatva depends upon Agni, Ojas, and Bala, all of which are hormonally influenced.

Stress Hormones (Cortisol and the HPA Axis)

- Acute cortisol release supports survival and adaptive immune responses.

- Chronic cortisol elevation suppresses immunity, promotes inflammation, and leads to **Ojakṣaya and Vāta-Pitta aggravation**.
- Persistent stress thus weakens Vyādhikṣamatva and predisposes to chronic inflammatory and autoimmune disorders.

Thyroid Hormones (T₃ and T₄)

- Regulate basal metabolic rate, tissue metabolism, and immune cell activity.
- Hypothyroidism mirrors **Agni-mandya and Kapha dominance**, resulting in reduced immune responsiveness.
- Hyperthyroidism parallels **Agni-tikṣṇatā and Pitta predominance**, often leading to immune exhaustion.

Insulin and Metabolic Hormones

- Insulin resistance is associated with chronic inflammation.
- From an Ayurvedic view, this reflects **Āma accumulation and Medo-dhātu duṣṭi**, leading to compromised Ojas and Bala.

Melatonin and Sleep Regulation

- Adequate sleep enhances immune surveillance and antioxidant defense.
- Ayurveda regards proper Nidra as essential for **Ojas nourishment**, directly influencing Vyādhikṣamatva.
- **Sex Hormones (Estrogen, Progesterone, Testosterone)**
- Influence immune modulation, tissue regeneration, and vitality.
- Their balance sustains **Śukra dhātu and Ojas**, while imbalance leads to Dhātu-kṣaya and reduced disease resistance.

Thus, **hormonal equilibrium may be viewed as the modern physiological expression of balanced Agni, stable Ojas, and adequate Bala**.

Types of Bala (Vyādhikṣamatva)

1. Sahaja Bala (Inborn Immunity)

Corresponds to genetic and constitutional immunity, influenced by Prakṛti and maternal factors.

2. Kāla-ja Bala (Time-dependent Immunity)

Reflects age-related and seasonal immune variations, comparable to age-specific and circadian immune changes.

3. Yuktiṛta Bala (Acquired Immunity)

Developed through diet, lifestyle, rasāyana therapy, and controlled exposure—conceptually parallel to vaccination and immune training.

Classification of Vyādhikṣamatva by Acharya Cakrapāṇi

1. Vyādhibalavirodhi Vyādhikṣamatva

- Resistance after disease onset
- Comparable to **adaptive immunity**, enhanced by targeted immune responses and memory.

2. Vyādhi-utpāda-pratibandhaka Vyādhikṣamatva

- Prevention of disease initiation
- Comparable to **innate immunity**, supported by metabolic balance, hormonal stability, and tissue integrity.

Clinical Relevance

• Preventive Medicine

Strengthening Vyādhi-utpāda-pratibandhaka through dinacharyā, ṛtucharyā, stress management, sleep regulation, and metabolic balance.

• Curative Medicine

Enhancing Vyādhibalavirodhi through rasāyana, bṛṃhaṇa therapies, and immuno-endocrine modulation during disease.

CONCLUSION

Vyādhikṣamatva represents a comprehensive, integrative model of immunity that remarkably parallels modern concepts of innate and adaptive immune defense, while also incorporating metabolic and hormonal regulation. The Ayurvedic emphasis on Agni, Ojas, and Bala anticipates the contemporary understanding of the neuro-endocrine-immune axis.

Integrating classical Ayurvedic insights with modern immunology and endocrinology provides a holistic and clinically relevant framework for disease prevention, immune resilience, and sustainable health.

REFERENCES

1. Charaka Saṃhitā of Agniveśa, revised by Charaka and Dṛḍhabala, with *Āyurveda Dīpikā* commentary by Cakrapāṇi Edited by Acharya Y.T. Chaukhamba Surbharati Prakashan, Varanasi, 2017.
2. Suśruta Saṃhitā of Suśruta, with commentary by Dalhaṇa Edited by Acharya Y.T. Chaukhamba Surbharati Prakashan, Varanasi, 2018.
3. Roga Vijñāna and Vikṛti Vijñāna, Vol. I Dr. Manoj Sankaranarayana Chaukhamba Sanskrit Series Office, Varanasi, 2nd Edition, 2011. (*Concept of Vyādhikṣamatva and Bala*)
4. Dravyaguṇa Vijñāna, Vol. I Prof. P.V. Sharma Chaukhamba Bharati Academy, Varanasi.
5. Immunology for Ayurvedic Scholars Dr. N. Saxena Chaukhamba Orientalia, Varanasi, 2019.
6. Janeway's Immunobiology Janeway C.A. et al. Garland Science, New York, 8th Edition, 2012. (*Innate and adaptive immunity concepts*)
7. Guyton and Hall Textbook of Medical Physiology Hall J.E. Elsevier, 13th Edition. (*Hormonal regulation of immunity, stress response, metabolism*)
8. Williams Textbook of Endocrinology Melmed S. et al. Elsevier, 14th Edition. (*Hormone-immune interactions*).
- 9.