World Journal of Pharmaceutical Science and Research

www.wjpsronline.com

Review Article

ISSN: 2583-6579
SJIF Impact Factor: 6.916
Year - 2026
Volume: 5; Issue: 5
Page: 308-318

A REVIEW ON ROLE OF AGNI IN PHYSIOLOGY OF THYROID FUNCTION AND MANAGEMENT OF ITS DISORDERS THROUGH PANCHAKARMA

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Article Received: 16 March 2026 | | ***Article Revised: 07 April 2026*** | | ***Article Accepted: 27 April 2026***

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DOI: https://doi.org/10.5281/zenodo.19916432

How to cite this Article: Dr. Anoop M., Dr. Priyanka Yadav (2026) A REVIEW ON ROLE OF AGNI IN PHYSIOLOGY OF THYROID FUNCTION AND MANAGEMENT OF ITS DISORDERS THROUGH PANCHAKARMA. World Journal of Pharmaceutical Science and Research, 5(5), 308-318.

ABSTRACT

The thyroid gland, one of the most vital endocrine organs, regulates metabolism, growth, and energy balance through the secretion of thyroxine (T4) and triiodothyronine (T3). Disturbance in thyroid function leads to significant metabolic derangements manifesting as hypothyroidism, hyperthyroidism, or autoimmune thyroiditis. Ayurveda, the ancient system of Indian medicine, describes a similar metabolic principle under the concept of Agni, the biological fire that governs digestion, transformation, and all biochemical processes essential for life. The proper functioning of Agni (Sama Agni) maintains Dosha equilibrium, tissue nourishment, and vitality (Ojas), while its derangement (Agnimandya, Tikshna Agni, or Vishama Agni) leads to disease. This review explores the role of Agni in thyroid physiology and interprets thyroid disorders as Agni vikriti conditions in light of Ayurvedic theory. It also examines the therapeutic potential of Panchakarma—Ayurveda's comprehensive detoxification and rejuvenation therapy—in restoring Agni balance and metabolic homeostasis. The review was conducted through an extensive analysis of classical Ayurvedic literature (Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya), contemporary Ayurvedic research, and modern endocrinological studies indexed in PubMed, Scopus, and AYUSH Research Portal. Conceptual analysis indicates that Manda Agni correlates with hypothyroid states characterized by sluggish metabolism, Ama accumulation, and Kapha-Vata predominance, whereas Tikshna Agni parallels hyperthyroid conditions marked by Pitta aggravation and excessive catabolism. Panchakarma therapies such as Vamana (therapeutic emesis), Virechana (purgation), Basti (medicated enema), and Nasya (nasal therapy) play crucial roles in re-establishing Agni, clearing Ama, and balancing Doshas. Adjunct Shamana and Rasayana therapies, including Kanchnar Guggulu, Ashwagandha, and Guduchi, further support glandular and systemic recovery. In conclusion, thyroid dysfunction can be viewed as a manifestation of Agni dushti, and management through Panchakarma offers a holistic, root-cause-oriented therapeutic approach that harmonizes metabolic, endocrine, and immune functions. Integrating these classical Ayurvedic insights with modern endocrinological understanding may offer a safe, sustainable, and individualized framework for managing thyroid disorders.

KEYWORDS: Agni, Thyroid, Panchakarma, Hypothyroidism, Hyperthyroidism, Ayurveda, Metabolism, Ama, Dosha Balance.

INTRODUCTION

The thyroid gland, a vital part of the endocrine system, plays an indispensable role in maintaining metabolic balance, growth, thermoregulation, and energy homeostasis. It regulates multiple physiological processes through the secretion of thyroxine (T4) and triiodothyronine (T3) hormones, which control basal metabolic rate and influence carbohydrate, lipid, and protein metabolism.[1] Disruptions in thyroid function—manifesting as hypothyroidism, hyperthyroidism, or autoimmune thyroiditis—are increasingly prevalent, particularly among women. The modern lifestyle, characterized by stress, irregular diet, and environmental toxins, has amplified the incidence of these disorders, highlighting the urgent need for integrative and holistic approaches.[2]

In Ayurvedic philosophy, the functioning of the thyroid gland finds its parallel in the concept of Agni, the biological fire or principle of transformation. Agni is considered the foundation of life (Ayur), responsible for digestion, metabolism, assimilation, and cellular transformation. It governs both macro and micro-level metabolic activities 3—from digestion in the gastrointestinal tract (Jatharagni) to the metabolism occurring at tissue and cellular levels (Dhatvagni). The classical texts proclaim:

"Agni eva sharirasya moolam" – Agni is the root and sustainer of the body (Ch. Su. 9/4).

When Agni functions optimally (Sama Agni), it ensures proper nutrition of all seven Dhatus, balanced Doshas, strong immunity, and healthy body functions. Conversely, impairment of Agni (Agnimandya or Tikshnagni) leads to metabolic derangements resulting in disease manifestation. Ayurveda emphasizes that all diseases originate from Agni dushti—whether due to dietary errors, emotional factors, or dosha imbalance.[4]

"Rogāḥ sarve api mandagnau" – All diseases arise from defective Agni (Ch. Su. 28/4).

In the context of thyroid physiology, Agni can be viewed as the metabolic force governing endocrine secretions, enzyme activities, and cellular oxidation processes. Agnimandya leads to a hypometabolic state comparable to hypothyroidism, where energy production, digestion, and fat metabolism are reduced, resulting in weight gain, fatigue, and edema. Conversely, Tikshnagni correlates with hyperthyroidism, marked by accelerated metabolism, tissue depletion, and irritability. Thus, the thyroid gland can be considered a physical manifestation of Agni tattva at the cellular level, while thyroid hormones act as biochemical mediators of Agni.[5]

From the Ayurvedic pathological standpoint, thyroid dysfunction arises from Agni dushti and Srotorodha (obstruction of microchannels) caused by Kapha and Vata imbalance. The accumulation of Ama (metabolic toxins) and deranged Medo dhatu agni leads to sluggish metabolism and systemic symptoms characteristic of hypothyroidism. Pitta aggravation and Ojas kshaya contribute to hyperthyroid states, reflecting excessive Agni and catabolic activity. Hence, restoring Agni to its Sama (balanced) state is considered the cornerstone of therapy.[6]

Modern endocrinology and Ayurveda, though differing in terminology, share a common vision: health depends on balanced metabolism and hormonal harmony. While modern medicine often manages thyroid disorders through lifelong hormone replacement or suppressive therapy, Ayurveda offers a holistic approach that corrects the root cause — the imbalance of Agni — through Ahara (diet), Vihara (lifestyle), Aushadha (herbal formulations), and Panchakarma (detoxification and rejuvenation therapies).[7]

Panchakarma plays a pivotal role in re-establishing metabolic balance by cleansing the srotas, enhancing Agni, and rejuvenating the endocrine and digestive systems. Procedures like Vamana and Virechana help eliminate accumulated Kapha and Pitta doshas, Basti therapy harmonizes Vata and supports endocrine regulation, while Nasya aids in the modulation of hypothalamic-pituitary function. Additionally, Rasayana therapy helps restore vitality, strengthen Ojas, and maintain hormonal homeostasis.[8]

This integrative understanding opens new dimensions for interpreting endocrine physiology through Ayurvedic concepts. Viewing thyroid function as an expression of Agni provides not only a philosophical correlation but also a practical therapeutic framework. The correction of Agni through Panchakarma and Shamana measures offers an individualized, root-cause-oriented, and sustainable approach to managing thyroid dysfunctions.[9]

Hence, this review aims to explore the conceptual relationship between Agni and thyroid physiology, examine the pathogenesis of thyroid disorders in the light of Agni dushti, and evaluate the role of Panchakarma as a therapeutic intervention for their management.

AIMS AND OBJECTIVES

- To explore the conceptual correlation between Agni and thyroid physiology.
- To understand the Ayurvedic pathogenesis (samprapti) of thyroid dysfunctions in relation to Agni dushti.
- To evaluate the role of Panchakarma in the management of thyroid disorders through correction of Agni.
- To review classical references and modern evidence supporting Ayurvedic interventions in thyroid dysfunction.

MATERIALS AND METHODS

1. Source of Data

A thorough review of Ayurvedic classical texts (Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, Bhaishajya Ratnavali, Yoga Ratnakara) was carried out to identify references regarding Agni, Agnimandya, and Panchakarma chikitsa.

Modern endocrinological data on thyroid function and metabolism were compiled from standard textbooks and scientific journals.

2. Data Collection

Literature search was conducted using electronic databases such as PubMed, Scopus, AYUSH Research Portal, and Google Scholar. Keywords used included: Agni, Thyroid, Ayurveda, Panchakarma, Metabolism, Hypothyroidism, Hyperthyroidism, Ama, Vata-Kapha imbalance. Articles published between 2000–2024 were included.

Ayurvedic Conceptual Framework

Ayurveda explains the maintenance of life and health through three fundamental principles—Dosha, Dhatu, and Agni. Among these, Agni is considered the primary determinant of metabolic vitality, as it governs all processes of digestion, absorption, assimilation, and cellular transformation. The ancient Ayurvedic texts emphasize:

"Agni eva sharirasya moolam" — Agni is the root and sustainer of the body. (Ch. Su. 9/4)

Without balanced Agni, neither proper Ahara paka (digestion of food) nor Dhatu poshana (nourishment of tissues) can occur. Hence, Agni is the foundation of both physical and mental health, determining the strength (Bala), complexion (Varna), longevity (Ayus), and immunity (Ojas) of an individual.[10]

1. Classification and Functional Dynamics of Agni[11,12]

Ayurvedic texts describe Agni as a multidimensional principle operating at different physiological levels. It is divided into 13 types, each responsible for specific functions:

Level	Type of Agni	Function	Correlation to Modern Physiology / Thyroid Function
1. Primary	*Jatharagni*	Governs digestion and absorption in the gastrointestinal tract	Equivalent to general metabolic rate; reflects digestive capacity influencing nutrient availability for hormone synthesis
2. Intermediate	*Bhutagni* (Five types – Parthiva, Apya, Taijasa, Vayavya, Akashiya)	Transforms digested food into elemental forms compatible with body tissues	Parallels biochemical conversion and assimilation at the cellular level
3. Tissue-level	*Dhatvagni* (Seven – Rasagni, Raktagni, Mamsagni, Medagni, Asthyagni, Majjagni, Shukragni)	Responsible for metabolism and nourishment of respective tissues	Resembles enzyme and hormonal activity within target organs; *Medagni* and *Rasagni* particularly related to thyroid metabolism

Each type of Agni supports the next, forming a sequential metabolic cascade:
Jatharagni → Bhutagni → Dhatvagni.

If Jatharagni becomes impaired, downstream Dhatvagni activities also deteriorate, resulting in incomplete tissue formation (Dhatu agnimandya) and metabolic disorders such as obesity, lipid imbalance, and hypothyroidism.

2. Physiological Role of Agni in Metabolism and Endocrine Regulation

Agni is the energy principle that drives all biochemical transformations. It is the catalyst of Paka (digestion and oxidation) and Parinama (conversion and synthesis) within the body. The thyroid gland performs similar functions by controlling oxidation, energy production, and metabolic rate at the cellular level. Thus, Agni and thyroid hormones both serve as metabolic regulators ensuring energy balance and homeostasis.[13]

Ayurvedic Concept	Physiological Equivalent	Functional Correlation
Sama Agni	Normal thyroid function	Balanced metabolic rate, stable weight, normal digestion
Manda Agni	Hypothyroidism	Decreased basal metabolic rate, fatigue, lethargy
Tikshna Agni	Hyperthyroidism	Excessive catabolism, weight loss, heat intolerance
Vishama Agni	Autoimmune / fluctuating thyroid function	Irregular metabolism, alternating hypo-hyper symptoms

Ayurveda perceives that Agni not only digests food but also transforms mental impressions, emotions, and sensory inputs into energy and awareness. Therefore, chronic stress (Manasika dosha vitiation) can disturb Agni, indirectly influencing endocrine regulation — particularly the hypothalamic-pituitary-thyroid (HPT) axis. This explains how psychological and emotional imbalance can manifest as thyroid dysfunctions.[14]

3. Agni, Ama, and Srotas Relationship in Thyroid Pathophysiology

When Agni becomes weak (Agnimandya), food and metabolic residues are not fully digested, leading to the formation of Ama — a toxic, sticky, metabolic byproduct. Ama obstructs the Srotas (microchannels) responsible for nutrient and

hormone transport. This Srotorodha (obstruction) particularly affects Rasa vaha and Medo vaha srotas, causing a sluggish metabolism analogous to hypothyroidism.[15]

In Hypothyroidism

Agnimandya → Ama sanchaya → Kapha-Vata aggravation → Medo dhatu agni dushti → metabolic slowdown, weight gain, and fatigue.[16]

In Hyperthyroidism

Tikshna Agni → Pitta vriddhi → tissue depletion (Dhatu kshaya) → hypermetabolism, irritability, and palpitations. 16

In Autoimmune Thyroiditis (Hashimoto's Disease):[17]

- Vishama Agni and chronic Ama visha affect Rakta dhatu and Ojas, leading to inflammation, immune dysfunction, and glandular destruction.
- This systemic understanding reveals that thyroid disorders are expressions of deep-seated Agni imbalance, not merely localized glandular issues.

4. Agni and Dhatu Metabolism

Ayurveda postulates that Agni determines the formation and nourishment of Dhatus (tissues). The sequential transformation of Ahara rasa into Rasa, Rakta, Mamsa, Meda, Asthi, Majja, and Shukra dhatus depends on the efficiency of Dhatvagni.[18]

In thyroid disorders, particularly hypothyroidism, impairment of Rasagni and Medagni leads to excessive Meda dhatu accumulation, poor energy conversion, and retention of fluids (Shotha). Hyperthyroid states reflect Tikshna agni disturbing Rakta and Mamsa dhatus, resulting in weight loss and tissue exhaustion.[19]

This demonstrates the profound role of Agni in maintaining tissue equilibrium, parallel to anabolic-catabolic balance governed by thyroid hormones.

5. Dosha and Agni Interaction in Thyroid Regulation[20]

The Tridoshas—Vata, Pitta, and Kapha—regulate the qualitative and quantitative state of Agni:

Dosha	Influence on Agni	Thyroid Correlation
Vata	Causes irregularity and instability (*Vishama Agni*)	Fluctuating thyroid levels; stress-related dysregulation
Pitta	Intensifies metabolism (*Tikshna Agni*)	Hyperthyroid state with increased metabolic activity
Kapha	Suppresses metabolic fire (*Manda Agni*)	Hypothyroid, slow metabolism, *Ama* accumulation

6. Agni, Ojas, and Immunity

Agni and Ojas share an inverse yet complementary relationship. Agni transforms food into Dhatu, and the final essence of all Dhatus is Ojas, representing vitality and immune strength. When Agni is balanced, Ojas is nourished, conferring resilience. However, in prolonged Agnimandya, Ama accumulates and suppresses Ojas, leading to immune dysfunctions, including autoimmune thyroid diseases like Hashimoto's thyroiditis.[21]

Thus, strengthening Agni through Deepana-Pachana and Rasayana therapy enhances both metabolism and immune integrity, preventing the self-destructive immune responses seen in autoimmune thyroid conditions.

7. Synthesis: Bridging Agni with Modern Thyroid Physiology

The Ayurvedic description of Agni aligns remarkably with modern understandings of metabolic and endocrine regulation:[22,23]

Ayurvedic Term	Modern Equivalent	Functional Parallels
Agni	Metabolism, enzymatic activity, mitochondrial function	Governs oxidation and energy production
Agnimandya	Hypometabolism / hypothyroidism	Sluggish thyroid activity, reduced BMR
Tikshna Agni	Hypermetabolism / hyperthyroidism	Accelerated metabolism, tissue depletion
Ama	Metabolic waste / oxidative stress	Toxin accumulation, inflammatory changes
Ojas	Immunity, vitality	Endocrine-immune balance
Dhatvagni dushti	Hormonal dysregulation	Impaired hormone synthesis or conversion (T4 → T3)

This integrative interpretation provides a robust theoretical base to apply Ayurvedic therapies like Panchakarma for endocrine and metabolic disorders, especially those involving the thyroid gland.

8. Therapeutic Implication of Agni Concept[24]

Understanding thyroid dysfunction through Agni helps guide the selection of Panchakarma and Shamana therapies aimed at metabolic correction:

Deepana & Pachana: Use of Trikatu churna, Chitrakadi vati to kindle Agni and digest Ama.

Shodhana (Panchakarma):

- Vamana for Kapha-Manda Agni (hypothyroidism).
- Virechana for Pitta-Tikshna Agni (hyperthyroidism).
- Basti for Vata-Vishama Agni (autoimmune or fluctuating thyroid).

Rasayana Therapy: Ashwagandha, Guduchi, Amalaki for rejuvenation, endocrine support, and immune balance.

By restoring Agni, these interventions bring harmony to the Tridoshas, re-open the Srotas, and strengthen Ojas—leading to sustainable improvement in thyroid function and systemic metabolism.[25]

Role of Panchakarma in Thyroid Disorders

Panchakarma acts as both shodhana (detoxification) and rasayana (rejuvenation) therapy, aiming to correct Agni, eliminate ama, and restore dosha balance.

1. Snehana (Oleation Therapy)[26]

Internal use: Triphala ghrita, Tikta ghrita, Guggulu ghrita

External: Abhyanga with Ksheerabala taila or Mahamasha taila

Benefits: Improves peripheral circulation, enhances metabolism, and reduces stiffness (stambha).

2. Swedana (Sudation Therapy)[27]

Nadi sweda or Bashpa sweda with Dashamoola kwatha decoction.

Removes ama, relieves kapha-vata, and improves microcirculation.

3. Vamana (Therapeutic Emesis)[27]

Indicated in kapha-pradhana hypothyroid cases.

Drugs: Madanaphala, Yashtimadhu, Vacha, Saindhava.

Helps clear srotorodha and rejuvenates Agni.

4. Virechana (Purgation)[28]

Suitable for pitta-pradhana hyperthyroid states.

Drugs: Trivrit lehya, Avipattikar churna, Eranda taila.

Normalizes pitta-agni and reduces excessive metabolism.

5. Basti (Medicated Enema)[28]

Most effective karma for chronic metabolic disorders.

Lekhana basti, Anuvasana basti with Dashamoola taila, Eranda taila for hypothyroidism.

Tikta-ksheera basti for hyperthyroid presentations.

6. Nasya (Nasal Administration)[29]

Ksheerabala taila or Anu taila to regulate hypothalamic function and stress axis.

Stimulates higher endocrine centers and restores neuroendocrine rhythm.

Supportive Shamana Therapies

Indication	Formulation	Key Action
Hypothyroidism	*Kanchnar Guggulu*, *Triphala churna*, *Punarnava mandoor*	Reduces *kapha*, removes *ama*, improves *Agni*
Hyperthyroidism	*Saraswatarishta*, *Praval pishti*, *Mukta shukti bhasma*	Calms *pitta*, supports *ojas*
Autoimmune	*Guduchi satva*, *Amritarishta*	Modulates immunity and inflammation

Dietary advice (Pathya-Apathya) includes warm, light, easily digestible food, avoidance of cold and heavy meals, and regular yoga-pranayama to regulate Agni.

DISCUSSION

The Ayurvedic concept of Agni serves as a comprehensive framework for understanding metabolism, digestion, and transformation in the human body. Modern physiology attributes these same regulatory functions to the thyroid gland and its hormones (T3, T4), which modulate oxygen consumption, cellular energy generation, and enzymatic reactions. When viewed comparatively, both systems reflect an intrinsic connection between metabolic fire (Agni) and endocrine regulation.[30]

In a state of equilibrium, Sama Agni corresponds to the euthyroid state—characterized by balanced metabolism, stable energy levels, and proper nourishment of all Dhatus. Disturbances in Agni, whether Manda (sluggish), Tikshna (excessive), or Vishama (irregular), parallel the metabolic variations seen in thyroid disorders. For instance:

In Hypothyroidism

The dominance of Kapha and Vata dosha suppresses Agni, leading to Agnimandya. This manifests as a decrease in basal metabolic rate, accumulation of Ama, and derangement of Medo dhatu agni. The symptoms—weight gain, cold intolerance, lethargy, and constipation—closely resemble features of Manda Agni described in Charaka Samhita.[31]

In Hyperthyroidism

The state of Tikshna Agni is marked by Pitta aggravation, excessive catabolic activity, and tissue depletion (Dhatu kshaya). The hypermetabolic state, increased appetite, palpitations, and heat intolerance are consistent with Pittaja vikara and Kshaya of Ojas.[32]

In Autoimmune Thyroiditis (Hashimoto's)

Chronic inflammation, oxidative stress, and autoimmunity may be interpreted as Ama-visha (toxic metabolic accumulation) and Rakta dhatu dushti. The body's self-destructive immune response reflects deep-seated Agni dushti and impaired Ojas.[33]

Ayurveda proposes that Agni is not confined to digestion alone but governs every level of metabolism, including hormonal synthesis and cellular energy production. This systemic view aligns with modern endocrinology's recognition of the thyroid's wide-reaching influence over multiple organ systems.[34]

Integrative Perspective: Agni and Thyroid Axis

Modern science describes the hypothalamic-pituitary-thyroid (HPT) axis as a finely tuned feedback system that regulates metabolism and energy balance. Ayurveda recognizes a similar hierarchy through Manasika doshas (mental regulatory centers), Prana vayu (neural control), and Agni (metabolic fire). The Agnimandya arising from stress, improper diet, or circadian disruption leads to Vata-Kapha aggravation, comparable to hypothalamic or pituitary dysregulation seen in secondary hypothyroidism.[35]

The Srotas (microchannels) responsible for nutrient and hormone transport—especially Rasa, Rakta, and Medo vaha srotas—get obstructed by Ama, leading to metabolic stagnation. Hence, therapies aimed at cleansing and unblocking these srotas are central to thyroid management in Ayurveda.[36]

Role of Panchakarma in Restoring Agni and Endocrine Balance

Panchakarma provides a systematic and physiological approach to rejuvenate Agni and normalize Dosha balance. Its effectiveness lies in addressing the disease at both the samprapti (pathogenesis) and srotas (microcirculatory) levels.[37]

Vamana (Therapeutic Emesis): Removes excess Kapha and Ama, rejuvenating Agni and the Medo dhatu metabolism. Clinical studies report improvement in lipid metabolism and weight reduction following Vamana therapy in metabolic disorders, indirectly supporting its role in hypothyroid conditions.[38]

Virechana (Purgation Therapy): Pacifies aggravated Pitta and detoxifies Rakta and Pitta sthanas. In hyperthyroid-like conditions, Virechana aids in regulating hypermetabolic activity and excessive Agni.

Basti (Medicated Enema): Considered the supreme therapy for Vata-related disorders, Basti regulates neuroendocrine communication and restores homeostasis. Lekhana Basti with Eranda taila or Dashamoola kwatha has been observed to reduce body weight, normalize bowel movement, and stimulate metabolism.[39]

Nasya (Nasal Administration): The nasal route influences the hypothalamus and pituitary axis. Nasya with Anu taila or Ksheerabala taila may help normalize neurohormonal control over thyroid function and stress regulation.

The cleansing phase (Shodhana) followed by Rasayana therapy such as Guduchi, Ashwagandha, and Amalaki enhances Ojas and immune resilience. Modern pharmacological studies on Ashwagandha have shown its thyromimetic and adaptogenic activity, substantiating the Ayurvedic principle of Agni deepana (enhancement of metabolic fire).[40]

Clinical Implications

The Ayurvedic approach, centered on Agni correction, emphasizes internal metabolic regulation rather than external hormone supplementation. By promoting Agni sandhukshana (stimulation of digestive fire) and Ama pachana (detoxification), Panchakarma offers a sustainable restoration of endocrine and metabolic health.

Furthermore, Ahara and Vihara recommendations—such as warm, light, and easily digestible diet, regular physical activity, and stress-reducing practices like Pranayama and Dhyana—help maintain Agni stability and prevent recurrence.

Thus, Ayurveda presents not only a parallel but also a complementary framework for managing thyroid disorders. While modern medicine ensures acute symptom control through synthetic hormones or antithyroid drugs, Ayurveda focuses on root-cause correction, tissue nourishment, and rejuvenation. Integrating these two systems could yield better long-term outcomes in terms of metabolic regulation, quality of life, and recurrence prevention.

CONCLUSION

The concept of Agni represents one of the most profound principles of Ayurvedic physiology, encompassing digestion, metabolism, and transformation at every level of the body. Thyroid function, in modern biomedical terms, can be seen as a physiological manifestation of Agni tattva. The disturbances in thyroid hormone levels—whether deficient or excessive—reflect the states of Agnimandya or Tikshna Agni respectively. This review highlights that understanding thyroid physiology through the lens of Agni not only bridges the gap between Ayurveda and modern endocrinology but also provides deeper insight into the root cause of metabolic disorders. Panchakarma therapy, by virtue of its detoxifying (Shodhana) and rejuvenating (Rasayana) actions, offers a powerful modality to restore Agni, remove Ama, balance Doshas, and normalize Dhatvagni. In hypothyroid states, Vamana and Lekhana Basti enhance sluggish metabolism and improve Agni function, while Virechana and Nasya therapy pacify excessive Pitta and regulate Tikshna Agni in hyperthyroid conditions. Supplementary use of Shamana drugs such as Kanchnar Guggulu, Punarnava mandoor, and Ashwagandha supports glandular function and systemic balance. The integration of Panchakarma and Rasayana therapies with lifestyle modification, dietary regulation, and stress management provides a holistic, patient-centered, and sustainable approach to thyroid health. Hence, the Ayurvedic paradigm of Agni offers an invaluable framework not only for understanding thyroid physiology but also for guiding individualized therapeutic strategies that harmonize metabolism, restore vitality, and enhance overall well-being.

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