

## AN INSIGHT INTO GALAGANDA (GOITER): AN INTEGRATIVE APPROACH TO THYROID SWELLING

**Shashank T. P.\*<sup>1</sup>, Prashanth Jain<sup>2</sup>, Geetha B. Markande<sup>3</sup>**

<sup>1</sup>Final Year PG Scholar (Dept. of P.G Studies in Roganidana Evum Vikriti Vigyan), Alva's Ayurveda Medical College and Hospital, Moodubidire, Karnataka, India.

<sup>2</sup>Professor and HOD (Dept. of P.G Studies in Roganidana Evum Vikriti Vigyan), Alva's Ayurveda Medical College and Hospital, Moodubidire, Karnataka, India.

<sup>3</sup>Professor (Dept. of P.G Studies in Roganidana Evum Vikriti Vigyan), Alva's Ayurveda Medical College and Hospital, Moodubidire, Karnataka, India.

Article Received on  
04 August 2025,

Revised on 25 August 2025,  
Accepted on 15 Sept. 2025

<https://doi.org/10.5281/zenodo.17213288>



**\*Corresponding Author**

**Shashank T. P.**

Final Year PG Scholar  
(Dept. of P.G Studies in  
Roganidana Evum Vikriti  
Vigyan), Alva's Ayurveda  
Medical College and  
Hospital, Moodubidire,  
Karnataka, India.

### ABSTRACT

Thyroid swelling, classically referred to as goiter, presents a diagnostic and therapeutic challenge in clinical practice. It encompasses a broad spectrum of underlying pathologies, ranging from benign multinodular goiter to aggressive thyroid carcinoma. An integrative approach incorporating both Ayurvedic insights and modern diagnostic modalities enhances clinical decision-making in conditions like *Galaganda*. This article presents a comprehensive clinical perspective on thyroid swellings, concluding in a multidisciplinary diagnostic and therapeutic framework.

**KEYWORDS:** *Galaganda, Kaphaja Nanatmaja Vikara, Goiter.*

### INTRODUCTION

A swelling in the neck resulting from an enlarged thyroid gland is termed as goiter, which originates from the Latin word for throat, 'guttur'.<sup>[1]</sup>

Goiter, is a common clinical presentation often requiring careful evaluation to distinguish benign conditions from malignancies. In India, an estimated 42 million people suffer from thyroid diseases and approximately 8.5% of the population have a thyroid nodule.<sup>[2]</sup> The

clinical approach to thyroid swelling involves a systematic process including patient history, physical examination, laboratory tests, imaging, and cytological evaluation.

## ETYMOLOGY

*Galaganda* is *Galaroga* which means swelling in the neck region-a kind of bird which has a pendulous fleshy purse hanging from its throat) – *Gandaberunda* (*Shabda kalpadruma*).

## Definition

Single swelling in the side of the neck region (*Gala*) it is called *Galaganda* (Goiter) and if there is a chain of swellings (Multiple) then it is called *Gandamala* (Cervical lymphadenopathy).<sup>[3]</sup>

## PARYAYA (Synonym)<sup>o</sup>

*Galasthana* (*Galagando Galasthana* - *Raja Nighantu*)

## MATERIALS AND METHODS

In *Ayurveda* Thyroid swelling is conceptually represented by *Galaganda* - a *Kaphaja Nanatmaja Roga*.<sup>[4]</sup>

According to *Charaka Samhita*, *Galaganda* is classified under *Mamsa Pradoshaja Vikara*, involving derangement of muscle tissue and *Kapha dosha*.<sup>[5]</sup>

As per *Vyadhi Namakarana Sidhantha* – *Adhistana* (site) - *Gala Pradesha* - a big or small size swelling adhering firmly over the neck region. *Laxana* - *Galaganda* - resembling the shape of a scrotal sac (*Mushkavat*).

महान्तं शोथमल्पं वा हनुमन्यागलाश्रयम् । लंबन्तं मुष्कवद् दृष्ट्वा गलगंडं ववननर्दिशेत्<sup>[6]</sup>॥

The chronicity of the condition is noted under *Ekadesha Shotha* (localized swelling).

Under the Broad Spectrum of *Galaganda*, variety of thyroid swellings and other thyroid diseases can be incorporated.

## Nidana of Galaganda

As per *Ayurveda* literatures, no specific *nidana* causing *Galaganda* are being mentioned. *Galaganda* is specifically mentioned in *Ashtanga Hridaya* by *Vagbhata* in the context of *Mukharoga*<sup>[7]</sup> given specific *nidanas*. Hence, these *nidanas* can be taken for manifestation of *galaganda* too.

1. *Aharaja Nidana* - Intake of fish, meat of buffalo, pig/consumption of unripe radish/Soup of curds, milk and milk products/Sugar cane and its products.
2. *Viharaja Nidana* - Improper sleeping position/Person who avoids brushing of teeth.
3. Others - Improper measures after *Dhumana*(medicated smoking), *Chardana*(Emesis therapy), *Gandusha*, *Siravyadha*(Blood letting).

Few references under different topics as *Galaganda Nidana* available are, Etiology for *Sotha Roga*<sup>[8]</sup>, *Nanatmaja Kaphaja Roga (Doshabala Pravrita)* - Etiology for *Kapha Prakopa*<sup>[9]</sup>, *Adidaivika –Kalabala pravrita Vyadhi – Deshaja - Acharya sushruta* mentioned certain diseases like *galaganda* etc in *Himavat pradesha* i.e., endemic goitre (iodine deficiency) is more prevalent in certain (Hilly) geographical areas in India (Himalaya region).<sup>[10]</sup>, Excessive use of *Madhura Rasa* can produce *Galaganda*.<sup>[11]</sup>

### Causes of Thyroid Swelling (Goitre)

- Iodine Deficiency → Endemic goitre
- Genetic → Dysmorphogenesis (↑ / ↓ activity)
- Nodule → Benign (Adenoma) / Malignant (Papillary, Follicular, Medullary, Anaplastic)
- Autoimmune (Hashimoto's, Graves')
- Environmental → Goitrogenic foods, Drugs (Sulfonylureas)
- Smoking
- Infections → Thyroiditis:
  - Acute → Bacterial / Viral
  - Chronic → Autoimmune (Hashimoto's)

### BHEDA

*Charaka* attributes *Galaganda* only to vitiated *kapha dosha* but *Sushruta* and *Vagbhata* described three types of *Galaganda*.<sup>[12]</sup>

1. *Vataja*
2. *Kaphaja*
3. *Medoja*

### Classification of Goitre<sup>[13]</sup>

#### Based on etiology

- Physiological Goiter (Pregnancy or puberty)
- Pathological Goiter – Neoplastic or Inflammatory conditions

**Based on epidemiology**

- Familial Goiter
- Endemic Goiter

**Based on anatomy**

- Cervical Goiter
- Retrosternal Goiter
- Intrathoracic Goiter

**Based on function**

- Toxic Goiter
- Non-toxic Goiter

**Based on morphology**

- Diffuse Goiter
- Nodular Goiter – Solitary nodular/Multinodular

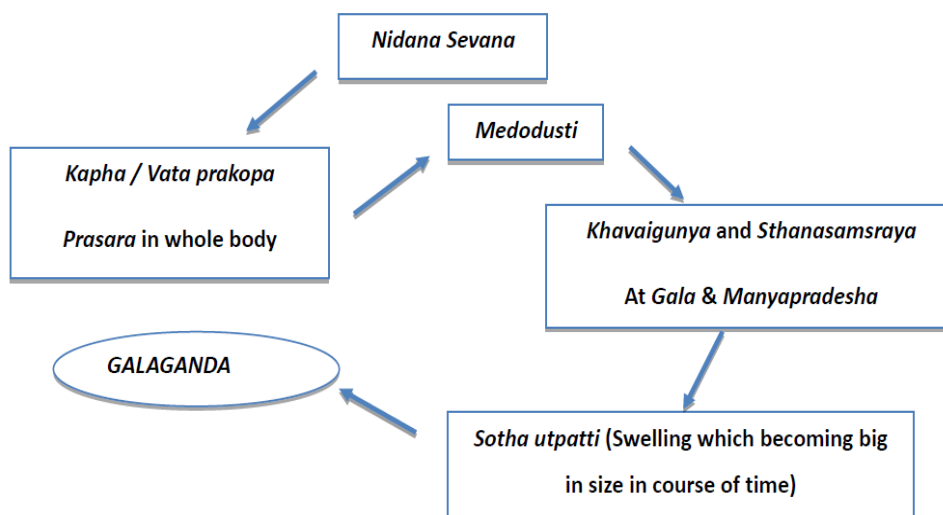
**Based on physical examination/palpation (WHO)**

- Grade 0 - No palpable or visible Goiter
- Grade 1 - A Goiter that is palpable but not visible when the neck is in the normal position (i.e. the thyroid gland is not visibly enlarged).
- Grade 2 - A swelling in the neck that is clearly visible when the neck is in a normal position and is consistent with an enlarged thyroid gland when the neck is palpated.

**SAMPRAPTI (Pathogenesis)**

Due to intake of *Mithyahara viharas*, *Kapha* gets vitiated reaches outer aspect of neck region causing gradually swelling is known as *Galaganda*.<sup>[14]</sup>

*Vata* and *Kapha* with the *Medas* getting localized in the sides of the *Gala & Manya* (Throat region), causing swelling which becoming big in size in course of time with their own features.<sup>[15]</sup>



### **SAMPRAPTI GHATAKA**

*Dosha - Kapha, Vata*

*Dushya – Rasa, Mamsa, Meda,*

*Srotas-Medovaha srotas and Rasavaha srotas*

*Srotodushti-Sanga*

*Adhisthana - Gala/Manyapradesha*

*Sadhyasadyata-Yapya / Krichhrasadya*

### **Initial Clinical Evaluation of Thyroid Nodules**

Understanding the underlying cause of thyroid nodules is crucial for accurate diagnosis and management.<sup>[16]</sup>

#### **1. History Taking**

- Duration and progression of swelling.
- Symptoms of hyperthyroidism: weight loss, palpitations, tremors, heat intolerance.
- Symptoms of hypothyroidism: fatigue, weight gain, cold intolerance, constipation.
- Pressure symptoms: dysphagia, dyspnea, hoarseness of voice.
- Family history of thyroid disease, autoimmune disorders, or thyroid cancer.
- History of neck irradiation (especially in childhood).

#### **2. Physical Examination**

- **Inspection:** size, shape, symmetry, skin changes.

- **Palpation:** consistency (soft, firm, hard), tenderness, mobility with deglutition, nodularity.
- **Lymph nodes:** cervical lymphadenopathy (firm/fixed → suspicious for malignancy).

### 3. Laboratory Investigations

- **Thyroid Function Tests (TFT)**
  - Toxic goitre: ↓ TSH, ↑ FT3/FT4.
  - Nontoxic goitre: normal TSH.
  - Hypothyroid goitre: ↑ TSH, ↓ FT3/FT4.
- **Thyroid Antibodies:** Anti-TPO, Anti-thyroglobulin → autoimmune thyroiditis.

### 4. Imaging Studies

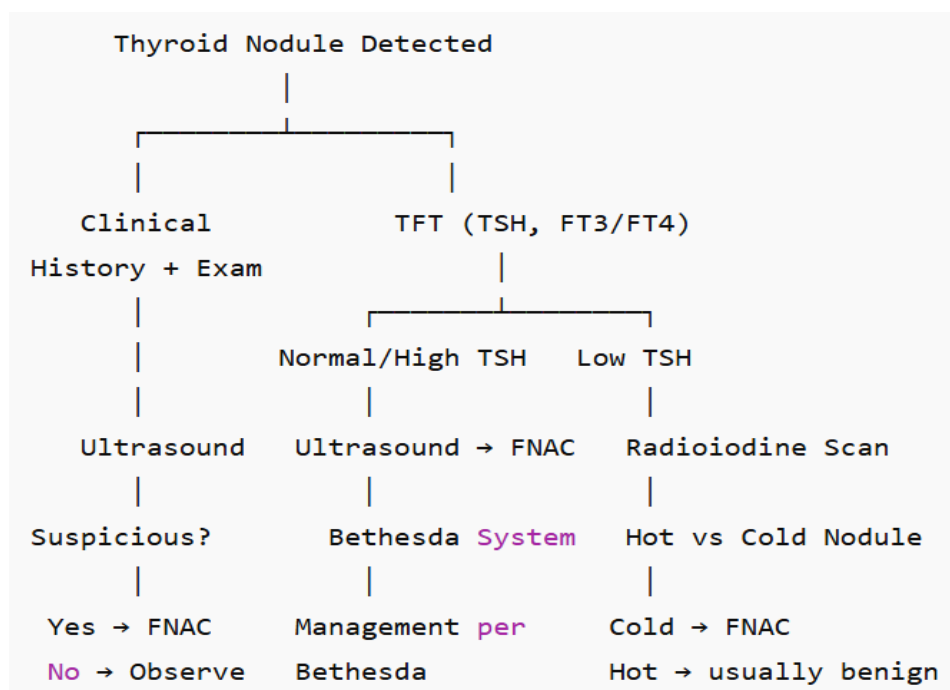
- **Ultrasound Neck:** nodule size, composition, margins, calcifications, vascularity; guides FNAC.
- **Radioiodine Scan (Scintigraphy):** “Hot” nodules (functioning, benign); “Cold” nodules (non-functioning, ↑ malignancy risk).
- **CT/MRI:** large retrosternal goiters, compressive symptoms, suspicion of invasion.

### 5. Fine Needle Aspiration Cytology – Gold Standard

FNAC is recommended for thyroid nodules larger than 1 cm if they have suspicious ultrasound features, such as microcalcifications, irregular margins, marked hypoechogenicity, taller-than-wide shape, or evidence of extrathyroidal extension.

For nodules that appear benign on ultrasound, FNAC is generally considered when they are larger than 1.5–2 cm. Performing the procedure under ultrasound guidance significantly improves diagnostic yield and reduces inadequate or non-diagnostic samples, especially in small, cystic, or posteriorly located nodules.

**Reported by Bethesda System<sup>[17]</sup>:** The Bethesda System for Reporting Thyroid Cytopathology (TBSRTC) is the most widely accepted classification system for Fine Needle Aspiration Cytology (FNAC) of thyroid swellings. It standardizes reporting, guides clinical management, and estimates the risk of malignancy.

**Flowchart – Evaluation of Thyroid Nodule****SADHYASADHYATA (Prognosis)**

- ° *Sadhya* — *Galaganda* (Simple)
- ° *Asadhya* — *Galaganda* with *Pinasa*, *Parsvasula*, *Kasa*, *Jvara*, *Chardi*.
- ° Rejected case – Recurrent Laryngeal Nerve Paralysis- *Galaganda* patient having difficulty breathing, flaccidity of whole body, disease duration of more than a year, suffering from anorexia, is emaciated and has hoarseness of voice(*Bhinnaaswara*).

**DISCUSSION**

In general, thyroid swellings can be conceptually mapped to *Galaganda*, a *Kapha*-dominant disorder arising from *Mamsa* and *Meda dusti*. Diverse symptoms of thyroid diseases and asymptomatic thyroid swellings present a great challenge in the diagnosis. Thyroid swellings can be broadly classified into diffuse or nodular goitres and may be benign or malignant.

While most nodular goitres are benign, malignancy should be suspected when nodules are hard, fixed, or associated with lymphadenopathy or voice changes. Although most isolated thyroid swellings are **benign**, it is difficult to exclude malignancy without Excision and Histological examination. Importantly, a normal TFT does not exclude malignancy. **USG** and **FNAC** are valuable tools in assessing the need for surgical intervention in thyroid swellings. Further **USG guided aspiration** will certainly enhance the **cytological yield** and **increase diagnostic accuracy**. Then Cytological studies (**FNAC**) are more sensitive than sonological

studies in differentiating neoplastic and non neoplastic lesions and are presently valuable adjuncts to preoperative screening in the diagnosis of thyroid nodule.

## CONCLUSION

Thyroid swellings, though often benign, necessitate vigilant evaluation to rule out malignancy. Thyroid swelling may arise due to various etiologies including iodine deficiency, autoimmune disorders, neoplasms, and infections. Clinical evaluation is enhanced by ultrasonography and FNAC, which serve as first-line diagnostics in the current standard of care. In USG, the use of the Thyroid Imaging Reporting and Data System (TI-RADS) can stratify malignancy risk and guide biopsy decisions. FNAC is a pivotal diagnostic tool for preoperative evaluation due to its high sensitivity and specificity. The Bethesda system standardizes cytological reporting and guides management.

Under the Broad Spectrum of *Galaganda*, variety of thyroid swellings and other thyroid diseases can be incorporated. *Galaganda* is not viewed merely as a cosmetic swelling but as a systemic disorder involving *Dosha* and *Dhatu* imbalance. A combined approach utilizing *Ayurvedic* diagnostics and therapeutic frameworks alongside modern imaging and cytology ensures a precise and holistic approach and can improve patient outcomes alongside dietary and lifestyle context. *Ayurvedic* interventions may also serve supportive roles post-surgery or during long-term management of benign swellings.

## REFERENCES

1. Brainly / <https://brainly.com> › Goitre
2. Unnikrishnan AG, Menon UV. Thyroid disorders in India: An epidemiological perspective. Indian J Endocrinol Metab., Jul. 2011; 15(2): S78-81. doi: 10.4103/2230-8210.83329. PMID: 21966658; PMCID: PMC3169866.
3. Agnivesha, CharakaSamhita with Ayurveda Deepika commentary of Chakrapanidatta revised by Charaka and Dridhabala, edited by Vaidya Yadavaji Trivikram ji Acharya, published by Chaukamba publishers, edition., 2020; chikitsasthana 12/79.
4. Agnivesha, CharakaSamhita with Ayurveda Deepika commentary of Chakrapanidatta revised by Charaka and Dridhabala, edited by Vaidya Yadav Ji Trivikram ji Acharya, published by Chaukamba publishers, edition, 2020 sutrasthan, 20/17, 115.
5. Dr. Priyanka Ashok Shinde, Dr. Supriya Shailendra Mane, A Critical Study Of Charakokta Mamsapradoshaja Vikara Ijcert, November 2023; 11(11). | Issn: 2320-2882.



6. Susruta, Susruta Samhita, with Nibandha Samgraha commentary of Sree Dalhana Acharya and Nyaya chandrika Panchaka of Sri Jayadasa Acharya and edit ed by Vaidya Acharya Tri Vikram Ji Yadav Ji, Chaukamba orientalia, Varanasi, edition-2019, Nidanasthana 11/29, 315.
7. Vagbhata Ashtanga Hridaya, Uttaratanttra*Mukharoga* 21/69, edited by Bhisagacharya Harisastri Paradakar a Vaidya with commentaries by Arunadatta and Hemadri. Varanasi: ChowkhambaSanskrit Series. [Crossref][PubMed][GoogleScholar]
8. Agnivesha, CharakaSamhita with Ayurveda Deepika commentary of Chakrapanidatta revised by Charaka and Dridhabala, edited by Vaidya Yadav Ji Trivikram ji Acharya, published by Chaukamba publishers, edi tion 2020 sutrasthana, 18/21.
9. Agnivesha, CharakaSamhita with Ayurveda Deepika commentary of Chakrapanidatta revised by Charaka and Dridhabala, edited by Vaidya Yadav Ji Trivikram ji Acharya, published by Chaukamba publishers, edi tion 2020 sutrasthana, 20/1.
10. Susruta, Susruta Samhita, with Nibandha Samgraha commentary of Sree Dalhana Acharya and Nyaya chandrika Panchaka of Sri Jayadasa Acharya and edit ed by Vaidya Acharya Tri Vikram Ji Yadav Ji, Chaukamba orientalia, Varanasi, edition-2019, Sutrasthana.45/21.
11. Agnivesha, CharakaSamhita with Ayurveda Deepika commentary of Chakrapanidatta revised by Charaka and Dridhabala, edited by Vaidya Yadav Ji Trivikram ji Acharya, published by Chaukamba publishers, edi tion, 2020 sutrasthana, 26/41-1.
12. Vagbhata Ashtanga Hridaya, Uttaratanttra*Mukharoga* 21/54-56, edited by Bhisagacharya Harisastri Paradakar a Vaidya with commentaries by Arunadatta and Hemadri. Varanasi: ChowkhambaSanskrit Series..[Crossref][PubMed][GoogleScholar]
13. Bhatt S. SRB's Manual of SurgeryChapter 29.New Delhi: Jaypee Brothers Medical Publishers, 499. [Crossref][PubMed][GoogleScholar]
14. Agnivesha, CharakaSamhita with Ayurveda Deepika commentary of Chakrapanidatta revised by Charaka and Dridhabala, edited by Vaidya Yadavaji Trivikram ji Acharya, published by Chaukamba publishers, edition 2020 Sutratana 18/21.
15. Susruta, Susruta Samhita, with Nibandha Samgraha commentary of Sree Dalhana Acharya and Nyaya chandrika Panchaka of Sri Jayadasa Acharya and edit ed by Vaidya Acharya Tri Vikram Ji Yadav Ji, Chaukamba orientalia, Varanasi, edition-2019, Sutrasthana. 11/22.
16. BhattS. SRB's Manual of Surgery. Chapter29.New Delhi:Jaypee Brothers Medical Publishers, 521. [Crossref][PubMed][GoogleScholar]

17. Cibas ES, Ali SZ. The Bethesda System for Reporting Thyroid Cytopathology. *Am J Clin Pathol*, Nov. 2009; 132(5): 658-65.
18. Agnivesha, CharakaSamhita with Ayurveda Deepika commentary of Chakrapanidatta revised by Charaka and Dridhabala, edited by Vaidya Yadavaji Trivikram ji Acharya, published by Chaukamba publishers, edition 2020. Chikitsasthana. 12/79.
19. Susrutha, Susrutha Samhita, with Nibandha Samgraha commentary of Sree Dalhana Acharya and Nyaya chandrika Panchaka of Sri Jayadasa Acharya and edit ed by Vaidya Acharya Tri Vikram Ji Yadav Ji, Chaukamba orientalia, Varanasi, edition-2019, Nidanasthana. 11/26-27.
20. Gharib H, Papini E, Paschke R, et al. American Association of Clinical Endocrinologists and Associazione Medici Endocrinologi Medical Guidelines for Clinical Practice for the Diagnosis and Management of Thyroid Nodules. *Endocr Pract.*, May 2010; 16(1): 1-43.