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**ANATOMICAL FEATURES OF THE LEVATOR GLANDULAE THYROIDEAE
MUSCLE: LITERATURE REVIEW**

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Levator glandulae thyroideae (LGT) is an inconstant fibromuscular or fibromusculoglandular band of the anterior neck, most commonly extending from the thyroid gland, typically its pyramidal lobe, to the hyoid apparatus and, in most publications, is regarded as an anatomical variant rather than a constant muscle (Mori, 1964; Chaudhary et al., 2013). Cadaveric investigations in different populations demonstrate a markedly variable incidence, ranging from approximately 5–6% to more than 40%, with a clear predominance of unilateral left-sided occurrence, a frequent association with the pyramidal lobe of the thyroid gland, and occasional bilateral or multi-slip configurations (Sultana et al., 2011; Kotisso & Ali, 2018; Kishorenaick et al., 2016; Marjanović et al., 2021).

From an embryological perspective, LGT is interpreted as a caudal persistent remnant of the thyroglossal duct, a transient epithelial tract that guides the descent of the thyroid primordium and normally undergoes involution by approximately the tenth week of gestation; incomplete regression accounts for its frequent coexistence with anomalies of the pyramidal lobe, residual thyroglossal duct structures, and the presence of ectopic thyroid tissue within the band (Mori, 1964; Moore et al., 2015). On this embryological basis, Mori proposed the classical five-type classification—hyopyramidalis, thyreopyramidalis, thyreoglandularis, hyoglandularis, and tracheoglandularis—which remains the principal morphological framework, with the thyreoglandularis type being the most common, whereas subsequent authors have expanded this scheme by describing multiple slips, bilateral muscles, and fibromusculoglandular cords containing thyroid follicles (Mori, 1964; Ozturk et al., 2008; Kim et al., 2010; Sierpińska et al., 2024).

Histologically, LGT encompasses a continuum from delicate fibrous bands to well-developed muscular bundles and structures rich in thyroid follicles, and morphometric observations indicate that its presence significantly modifies the size and shape of the pyramidal lobe: in such specimens, the pyramidal lobe tends to be longer, wider, and thicker than in cases where it occurs in isolation. In a considerable proportion of examined cases, ectopic thyroid tissue is identified within LGT and related fibrous bands, emphasizing the potential functional and pathological significance of this structure (Marjanović et al., 2021). Neurovascular studies demonstrate that LGT is typically innervated by branches of the external laryngeal nerve and is supplied predominantly by the superior thyroid artery, although variants of thyroid arterial architecture are not uncommon in this region and may have practical implications during surgical procedures (Chaudhary et al., 2013).

From a clinical standpoint, interest in the levator glandulae thyroideae has increased substantially in recent decades in the context of organ-preserving and oncologically adequate surgery of the thyroid gland and neck. If unrecognized and not resected, LGT may contribute to incomplete thyroidectomy, persistence of functioning or malignant thyroid tissue, and diagnostic errors when interpreting central neck masses as lymph nodes, tumor invasion, or residual thyroglossal duct elements (Geraci et al., 2008; Joshi et al., 2010; Marjanović et al., 2021). In this regard, meticulous preoperative imaging of the pyramidal lobe region and the presumed location of LGT, together with targeted intraoperative identification of this band and related embryological remnants, should be considered an integral component of contemporary, oncologically sound thyroid surgery aimed at reducing the rates of recurrence and iatrogenic complications.