**THE PREVALENCE OF THYROID IMA ARTERY AND ITS SIGNIFICANCE IN SURGERY**

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**BACKGROUND**: The thyroid ima artery (TIA) is an anatomical anomaly that commonly functions as an accessory blood supply for the isthmus and inferior aspect of the thyroid. Limited research has been performed to investigate the relative prevalence and clinical implications of the TIA in present literature.

**METHODS**: Dissections were conducted on cadavers in the anatomy laboratory at Touro College of Osteopathic Medicine, New York (Harlem Campus), with 94 subjects examined using standard methods to identify thyroid vasculature and to determine the presence of a thyroid ima artery. Known origins of the thyroid ima artery were also examined for possible branching.

**RESULTS**: Of the 94 cadavers, only one was found to have a thyroid ima artery present, suggesting a prevalence of 1.06 percent.

**CONCLUSION:** The thyroid ima artery is significant in its influence in head and neck procedures as well as emergent airway creation. With its relative rarity, its presence is worthy of consideration as a possible hematological source for hemorrhage. How do the results lead to the conclusion? The thyroid ima artery is a rare vascular variant that is present in 1-15% of the general population. Emergency and surgical considerations of the TIA are critical in hemostasis and preventing hemorrhage into the mediastinal cavity. Results of this study provide support for the lower aspect of the reported thyroid ima artery prevalence range. Greater standardization of TIA nomenclature and general research are additionally needed to highlight the significance of the TIA as it intersects numerous medical specialties.

**CONTENT CATEGORY:** Clinical Science

**KEYWORDS:** *Thyroid, Surgery, Ima Artery, Thyroidectomy, Prevalence*