

# **An anatomical study on pyramidal lobe of the thyroid gland in Sri Lankan population; Occurrence and clinical significance**

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## **ABSTRACT**

### **Introduction**

Total thyroidectomy is a common surgical procedure performed all over the world. Presence of a pyramidal lobe has an added functional and clinical significance. Even after performing a total thyroidectomy for Graves disease, an undetected pyramidal lobe or presence of residual thyroid tissue may be a cause of persistent hyperthyroidism or it also may be a site of a thyroid carcinoma. Therefore when performing a total thyroidectomy, a special attention should be paid to the pyramidal lobe to avoid leaving any residual thyroid tissues.

### **Objectives**

To determine the incidence, position, attachment and length of the pyramidal lobe in Sri Lankan population

### **Methodology**

At the department of Anatomy, Faculty of Medicine, Ragama, 3 formalin fixed cadavers with the age range of 45-75 selected randomly, were dissected to study the pyramidal lobes of the thyroid glands. Pyramidal lobes were identified extending upwards from the non-enlarged thyroid glands. The length and the breadth were measured using a flexible tape.

### **Results**

Eighteen male and twelve female cadavers were dissected and pyramidal lobes were found in 26.7% cadavers. Of the cadavers in whom the pyramidal lobes were present 27.8% were males and 25% were females.

Pyramidal lobes were on the right side in 37.5% cadavers and on the left side in 62.5% cadavers.

The length and the breadth of the pyramidal lobes varied from 1 to 38mm and 4 to 14mm respectively. In 62.5% cadavers, pyramidal lobes were associated with Levator glandulae thyroideae.

### **Conclusion**

Presence of a pyramidal lobe in the thyroid gland is not a rare occurrence. Therefore when performing thyroid operations, it is crucial to observe the anterior cervical region carefully to detect the presence of a pyramidal lobe. Since our sample size is small we intend to carry out further studies on this area.