

## **The History of Thyroidectomy**

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Surgery for goiter is the commonest endocrine surgical operation. Until 100 years ago thyroidectomy was undertaken with trepidation and often proved fatal. The first credible account is that of Roger Frugardi in 1170, the year in which Thomas à Beckett was murdered in Canterbury.

A well-documented account of partial thyroidectomy was provided by Pierre Desault of Paris in 1791, at the time of the French Revolution.

Thyroidectomy remained a perilous undertaking with mortality in excess of 40% until advances in anaesthesia (1840's), antisepsis (1860's) and haemostasis (1870's) enabled surgeons to operate with ever improving results and safety. Leading exponents were Theodor Billroth in Vienna (1829-1894) and Theodor Kocher in Berne (1841-1917), the latter applying techniques which reduced the mortality to 0.18%, an achievement which contributed to him being awarded the Nobel Prize for Physiology or Medicine in 1909.

The principal morbidities of thyroidectomy included recurrent laryngeal nerve injury, hypothyroidism and tetany/hypoparathyroidism. Advances in anatomical and physiological knowledge, accompanied by improving surgical techniques reduced these risks to acceptable levels.

Today we have improved preoperative diagnosis with techniques such as fine needle aspiration cytology (FNA) and cross sectional imaging.

Operations can be performed through smaller incisions using minimally invasive techniques (VAT), and employing new technologies of vascular control ( e.g. harmonic scalpel and ligature), leading to reduced length of hospitalisation. Progress in molecular biology and genetics has facilitated the introduction of prophylactic thyroidectomy in inherited disorders such as the MEN (multiple endocrine neoplasia) syndromes.

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