

Surgical drains in thyroid surgery: Does one practice fit all?

Asha Ali, Marija Spiteri, Enyi Ofo
St Georges Hospital NHS Trust, London, UK

Aim:

Thyroid surgery has traditionally included surgical drain insertion. Progression towards minimally invasive surgery has seen omission of drains with some patients being discharged within 23 hours. It is unclear in the literature however of the existing predictive factors of non-significant drain outputs.

This quality improvement project examines practice at one Tertiary Referral Unit with routine use of surgical drains for all thyroid surgery in benign and malignant disease.

Method:

Retrospective study of 100 adult patients undergoing elective hemithyroidectomy (n=76) and completion thyroidectomy (n=24) for both benign and malignant disease over a 15-month period (Oct 2018 – Dec 2019) at a tertiary referral unit.

Data collected and analysed included: patient, treatment, and disease factors.

Results:

No haemorrhage, recurrent laryngeal nerve injury or postoperative hypocalcaemia occurred. The average drain output for hemithyroidectomy procedures was 27ml/day (0-55ml) whilst for completion thyroidectomy, this was 22ml/day (0-45ml).

In hemithyroidectomies, index nodules $\geq 3\text{cm}$, BMI ≥ 25 and benign

disease were all associated with a higher-than-average drain output. The multivariate analysis of all these factors and drain outputs were statistically significant. Although non-consultant grade surgeons (Fellow, Specialist registrar) had a slightly higher than average drain output, these findings weren't statistically significant and therefore not a cause for concern.

For completion thyroidectomies, factors associated with a higher-than-average drain output were BMI ≥ 25 , non-consultant operating surgeon and benign disease process. The multivariate analysis of these factors and drain-outputs were not statistically significant. Probably owing to low case number (n=24)

Average period of admission for hemithyroidectomy and completion thyroidectomy patients was 2 days.

Conclusion:

In a selective patient population undergoing hemithyroidectomy and completion thyroidectomy procedures, we propose the omission of surgical drain insertion.

This will reduce the length of hospital stay and associated risks and costs, improve patient experience, and make ENT departments resilient to pressures of bed availability.