

Short Communication

Drain placement after thyroid surgery: the bra-strap line

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Abstract

In cases of thyroid surgery that require a drain post-operatively, the authors suggest the subcutaneous tunnelling of the drain to exit in the bra-strap line. This simple but effective technique hides the potentially unsightly resultant scars that may be of concern to women wearing clothes that expose the upper chest and lower neck. The bra-strap line can be easily found in the patient and the authors have found no additional complications with exiting the drain at this site.

Key words: Thyroidectomy; Surgical Treatment, Operative; Wound Healing; Drainage

Drain placement after thyroid surgery remains important to prevent the potential development of a haematoma that can result in acute venous congestion and upper airway obstruction. Although there is a body of evidence that demonstrates that this is not routinely required,¹ it is still indicated in certain circumstances as judged by the surgeon, such as when a large dead space is left.

In cases where drainage is required the exit site of the drain has traditionally been placed near to the operative site. For example it may be passed anterior to the sternocleidomastoid muscle and through platysma with the perforated part of the tube fitting in the gutter between the trachea and oesophagus.² This leaves a scar, albeit small, that can remain clearly visible. The central part of the upper chest/lower neck is particularly on show in women whose clothing is often designed to leave this part of the skin exposed. Whilst the thyroidectomy incision is placed in a neck skin crease and typically leaves a cosmetically pleasing result, this is not always the case with the drain scar. It is the authors experience from follow-up of patients that the drain scar can often cause distress to the otherwise satisfied patient. We, therefore, tunnel our drain subcutaneously from the operative site, to exit in the bra-strap line, below the clavicle, as demonstrated (Figure 1). The position of the bra-strap line in an individual can be observed pre-operatively, or estimated with confidence on the table, as it usually descends vertically from a point just medial to the acromial end of the clavicle. Placement is inferior to the deltopectoral groove, thus avoiding the risk of cephalic vein damage. This siting has several advantages:

- (1) The length of subcutaneous tunnelling ensures a securely placed drain with an airtight seal, allowing for effective suction drainage.
- (2) Cosmetically the scar is subsequently hidden, which may be of particular significance if the scar becomes hypertrophied or keloid.
- (3) Wound infection can occur with any drain site, but in this case the risk may be reduced on the same principle as it is with tunelled Hickman lines.

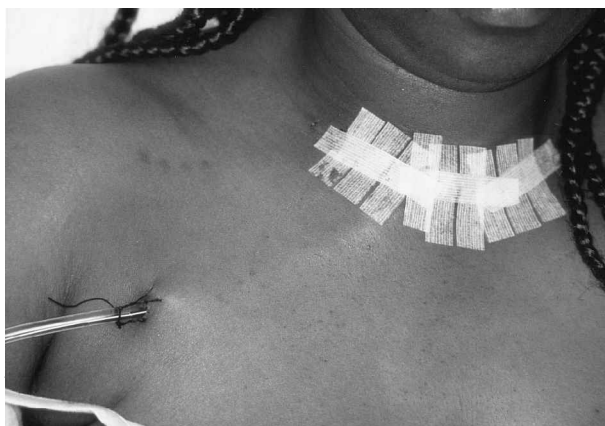


FIG. 1

The post-operative patient showing the dressed thyroidectomy wound and the drain exiting in the bra-strap line.

This method has been used in our department for the last three years, in over 30 cases, with no observed complications.

References

- 1 Tabaqchali MA, Hanson JM, Proud G. Drains for thyroidectomy/parathyroidectomy: fact or fiction? *Ann R Coll Engl* 1999;**81**:302–5
- 2 Keen G, ed. *Operative Surgery and Management*. Bristol: Wright PSG, 1981

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