The use of Tissue Patch, a self-adhesive sealant film to prevent post-operative vascular leakage after thyroid surgery

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Introduction
Meticulous haemostasis is required during thyroid surgery, to minimise the potentially devastating sequelae of post-operative bleeding. Its mainstay has been sound surgical technique and the use of haemostatic agents such as Surgicel™. TissuePatch™ is a self-adhesive, absorbable surgical sealant which has been used to minimise leakage in neurosurgery and thoracic surgery. We present a case series demonstrating its use in thyroid surgery.

Method
A retrospective case note review was conducted of all patients undergoing thyroid surgery under a single surgeon in whom TissuePatch™ was used. Patient demographics, nature of surgery and the type of patch were noted. Pre- and post-operative haemoglobin (Hb) levels, post-operative drain output and complications were recorded.

Results
54 patients received the patch. 91% were female. 74.1% underwent hemithyroidectomies followed by total thyroidectomies (18.5%), thyroglossal cyst excision (5.6%) and isthmusectomy (1.9%). Patches were applied to thyroid poles, beds and cut ends of thyroid tissue. The mean pre-operative Hb was 12.7 with a mean post-operative drop of 0.94. Length of hospital stay was 1.6 days. Drains were removed 1.25 postoperative days with an average drainage of 39.2mls. No patients required blood transfusion or suffered post-operative haematoma.

Conclusion
We have found that the use of the TissuePatch™ was a safe adjunct to ensure an effective seal to potential sources of oozing or bleeding from the operative site. The single sided patch was particularly easy to handle and apply, adapting easily to vascular beds on which it was placed.