The Journal of Laryngology & Otology

cambridge.org/jlo

How we do it: 'tonsil swabs please' – an alternative use in open neck surgery

E Mathew[1], D Nair[2], T Rourke[2] and R Corbridge[2]

[1]ENT Department, Milton Keynes University Hospital Milton Keynes, UK and [2]ENT Department, Royal Berkshire Hospital, Reading, UK

Abstract

Background. Thyroid and parathyroid surgery often involves the use of heated instruments for dissection. Whilst these are beneficial, accidental thermal damage to the exposed skin edges can occur, resulting in an unsatisfactory cosmetic outcome. Tonsil swabs can be used in head and neck surgery intra-operatively to control bleeding. This paper describes an alternative use for them in protecting wound edges during the procedure.

Method. Damp tonsil swabs are sutured onto the wound edges after the initial skin incision. They remain present for the duration of the surgery and are removed at the time of skin closure.

Results. The tonsil swabs provide protection and help avoid accidental injury to the skin. No complications with this technique have been experienced.

Conclusion. This paper describes a simple, effective and practical technique for protecting the skin during neck procedures using resources readily available in a standard ENT operating theatre.

Short Communication

Miss E Matthew takes responsibility for the integrity of the content of the paper

Cite this article: Mathew E, Nair D, Rourke T, Corbridge R. How we do it: 'tonsil swabs please' – an alternative use in open neck surgery. *J Laryngol Otol* 2021;**135**:844–845. https://doi.org/10.1017/S0022215121001705

Accepted: 27 December 2020
First published online: 11 August 2021

Key words:
Thyroid Gland; Palatine Tonsil; Skin; Parathyroid Glands; Endocrine Surgical Procedures; Otolaryngology; Wound Infection; Burns

Author for correspondence:
Miss E Mathew, ENT Department, Milton Keynes University Hospital, Standing Way, Eaglestone, Milton Keynes MK6 5LD, UK
E-mail: lizmathew22@hotmail.com

Introduction

Thyroid and parathyroid surgery often uses heated instruments to achieve adequate dissection and good exposure, and to reduce intra-operative bleeding. Whilst the use of electrical instruments (e.g. Harmonic scalpel) are beneficial to the procedure, accidental thermal damage to the exposed skin edges can occur intra-operatively. This can result in an unsatisfactory cosmetic outcome in what would otherwise be an occult skin crease incision.

Tonsil swabs can be used in head and neck surgery intra-operatively to control bleeding. This paper describes an alternative use for them in protecting wound edges during the procedure.

Technical description

The patient is prepped and draped for surgery. The skin and subcutaneous tissue is incised. Two damp tonsil swabs are sutured to the wound edge using size 3.0 silk. The sutures are placed around the wound edges at four separate points (corresponding with 12, 3, 6 and 9 o'clock) to secure the tonsil swabs, as illustrated in Figure 1. Skin retractors (e.g. Robson retractors) are then placed over the swabs and secured peripherally.

The swabs are kept in place for the duration of surgery and act as protection for the skin. Once haemostasis and dissection have been achieved and heated instruments are no longer in use, the holding stitches are cut and the swabs are removed to facilitate wound closure.

Discussion

This paper describes a simple but effective method of wound edge protection during head and neck surgery, in particular parathyroid and thyroid surgery. There are few methods described for protecting the skin during open neck surgery; other reported wound protection devices that are used to protect the skin include cut surgical gloves or a silicone Penrose drain.[1,2] There are no previous published reports of using tonsil swabs to protect the skin during neck surgery as described in this paper.

Tonsil swabs are readily available in an otolaryngology operating theatre. Their size and thickness prevent them from being an obstacle or disrupting the dissection. There is no extra significant financial cost associated with using tonsil swabs, whereas purchasing a niche wound protection device may incur a financial burden.

This quick, straightforward step additionally decreases the risk of wound infection by avoiding any further entry points caused by thermal damage around the incision site. The damp swabs also keep the skin edges moist, preventing drying out during longer procedures. This also facilitates wound closure at the end of the operation.

© The Author(s), 2021. Published by Cambridge University Press

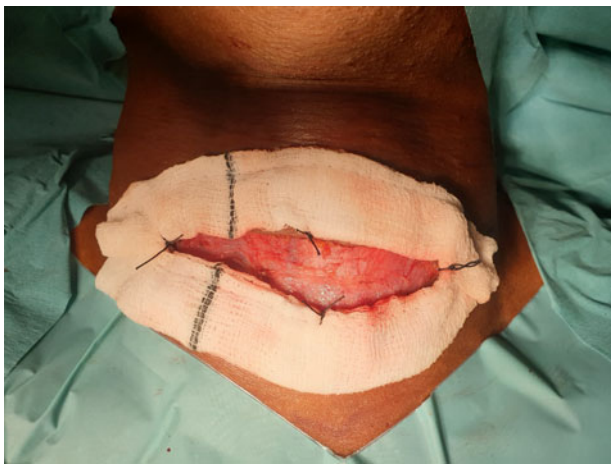


Fig. 1. Damp tonsil swabs sutured to wound edges in an Afro-Caribbean patient undergoing thyroid surgery.

The cosmetic outcome is additionally improved for the patient by using this technique. Whilst a neck incision is unavoidable in open surgery, superficial burns or extra scars can be avoided by this simple method. It is particularly beneficial in patients with darker skin types, where any scars can be more obvious. Indeed, the negative impact of scars has been reported to be more apparent after thyroid and parathyroid surgery among Asian and Afro-Caribbean patients.[3] This is an important additional consideration that surgeons should be aware of in these patient groups.

Overall, this is a simple and effective method to help improve scar cosmesis and appearance, and its use can be extended to various head and neck procedures.

Competing interests. None declared

References

1 Lira R, Carvalho G, Vartanian J, Kowalski L. Protecting the skin during thyroidectomy. *Rev Col Bras Cir* 2014;**41**:068–71
2 Lee Y, Kim B, Chang H, Park C. Use of a silicone Penrose drain to protect incised skin edges during thyroid surgery. *Surg Innov* 2012;**20**:NP1–2
3 Arora A, Swords C, Garas G, Chaidas K, Prichard A, Budge J *et al.* The perception of scar cosmesis following thyroid and parathyroid surgery: a prospective cohort study. *Int J Surg* 2016;**25**:38–43

https://doi.org/10.1017/S0022215121001705 Published online by Cambridge University Press