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SHORT COMMUNICATION

Indirect visualisation of the upper pole during tonsillectomy

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Abstract

Background: During tonsillectomy, one of the key concerns is establishing adequate haemostasis. Intra-operative haemorrhage from the upper pole of the tonsil fossae can be a challenge to deal with because of an inability to clearly visualise bleeding points. Laryngeal mirrors are readily available in an ENT operating theatre and routinely used for indirect visualisation of the post-nasal space during adenoidectomy.

Objective: This paper describes a technique, utilising a laryngeal mirror placed within the tonsil fossa (after having removed the palatine tonsil), to visualise the upper pole and any bleeding points.

Results and conclusion: Laryngeal mirrors can be used with case to inspect the tonsil fossa post-tonsillectomy for bleeding points which may not be directly visible, so that these can be cauterised.

Key words: Tonsillectomy; Hemostasis; Hemorrhage

Introduction

During tonsillectomy, one of the key concerns is establishing adequate haemostasis. Intra-operative haemorrhage from the upper pole of the tonsil fossae can be challenging to deal with because of an inability to clearly visualise the bleeding point. This is because the anterior border of the palatoglossus

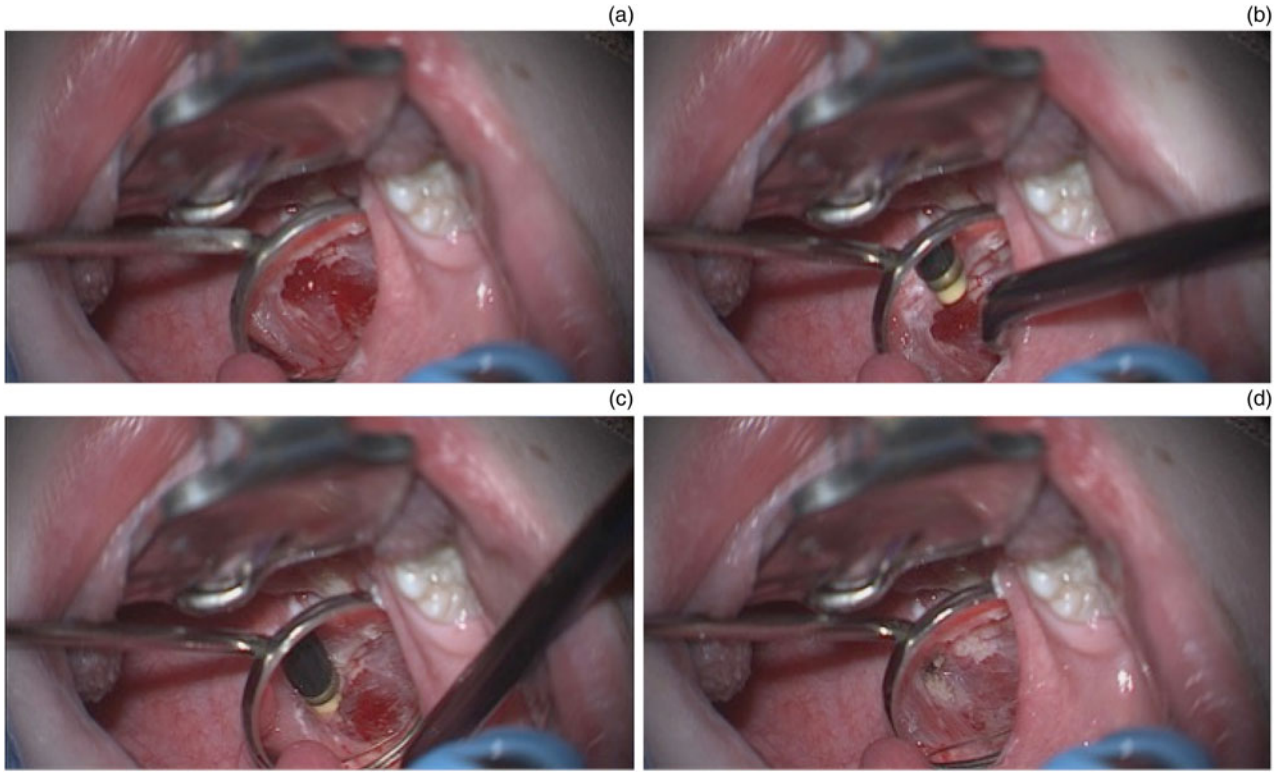


FIG. 1

(a) Visualisation of right upper pole bleeding vessel using the laryngeal mirror. (b) Coblator tip in view. (c) Bipolar diathermy applied to bleeding point. (d) Haemostasis achieved, whilst maintaining clear view of the upper pole.

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muscle obstructs a direct view of the upper pole of the tonsil fossae.

Traditionally, the Mollison's pillar retractor has been utilised for this purpose. However, the authors have worked with both the Mollison's retractor and the laryngeal mirror, and believe that the laryngeal mirror enables superior visualisation of the upper poles during tonsillectomy.

Thermal trauma from generous use of cautery has been postulated to increase the risk of post-operative haemorrhage rates,[1,2] and therefore focused and directed cautery has been advocated.

Laryngeal mirrors are readily available in an ENT operating theatre and are routinely used for indirect visualisation of the post-nasal space during adenoidectomy.

Technical description

The authors suggest a technique utilising a laryngeal mirror placed within the tonsil fossa, after having removed the palatine tonsil, in order to visualise clearly the upper pole and any bleeding points.

The patient is positioned supine, as per conventional tonsillectomy, with a Boyle–Davis mouth gag in situ. The mirror should be held in the surgeon's non-dominant hand; the coblator, bipolar forceps or straight Birkett forceps are held in the dominant hand.

Figure 1 shows a series of intra-operative photographs demonstrating the laryngeal mirror (with a 26 mm handle, model RSPU-300-308; Rocialle, Mountain Ash, Wales, UK) within the right tonsil fossa, and the coblator tip (Procise XP; Smith & Nephew, London, UK), which is used to coagulate the bleeding vessel on its bipolar diathermy setting. Figure 1d demonstrates a view of the upper pole after securing haemostasis.

Discussion

Managing haemorrhage from the upper pole of tonsil fossae is challenging, and there is paucity of published literature on optimum visualisation during haemostasis.

Conventional practice involves using the Mollison's pillar retractor to retract the anterior edge of the palatoglossus muscle to visualise the tonsil fossa. The laryngeal mirror has the advantage of being readily available in an ENT operating theatre and can provide an excellent view into the upper pole of the tonsil fossae after the tonsil has been removed.

This technique can also be used for visualising the posterior aspect of the anterior pillar and during surgical arrest of post-tonsillectomy haemorrhages, without incurring a significant additional expense.

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