

The use of GlideScope for biopsies of the tongue base

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Abstract

Objective: To report a case where GlideScope[®] is used for the biopsy of the tongue base.

Background: GlideScopes are used by anaesthetists for difficult intubations.

Case report: This paper reports a case where a GlideScope was used for biopsy of the tongue base. A review of the literature indicated that this was the first time a GlideScope had been utilised for this purpose.

Conclusion: It is suggested that this is a safe and ideal technique for biopsy of the tongue base, and GlideScopes could be used more frequently for this purpose in the future.

Key words: Tongue; Biopsy; GlideScope; Pathology; Diagnosis

Introduction

Examination of the tongue base can be difficult because of the angulation of the trajectory and salivary secretion, which obscure the view during assessment. The use of the GlideScope[®] can be an effective way of overcoming these issues; the angulation of the GlideScope provides a clear view, with an anti-fog system that prevents the clouding associated with secretions. We describe a case where the GlideScope was successfully used for the biopsy of the tongue base.

Case report

A 33-year-old woman attended the ENT out-patient clinic following a 2-year (intermittent) history of having the sensation of feeling a lump at the back of her throat. She smoked one packet of cigarettes per day and had no other complaints. Her throat examination showed hypertrophied lingual tonsils. She was booked for an examination and biopsy of the tongue base under general anaesthesia.

The patient was induced for general anaesthesia and an endotracheal tube was inserted. The GlideScope was used to visualise the tongue base, which enabled a very smooth procedure. Upwards-curving cup biopsy forceps were used for the punch biopsy. The patient was discharged after two hours with analgesic tablets.

Discussion

GlideScopes, which are designed for a wide variety of clinical settings, help to achieve a more successful intubation compared with traditional direct laryngoscopy.¹ In addition, GlideScopes can be used to intubate morbidly obese patients, or those with cervical spine instability.²

GlideScope video laryngoscopes (Figure 1) have 60-degree angulation, which provides a real-time view of the tongue base. The video laryngoscopes come in both single

use and reusable configurations. These are ideal for difficult and/or unpredictable airways or simply for the routine management of airways. If available, they can be up and running within seconds. They provide a consistently clear view with an anti-fog mechanism to resist clouding associated with secretions. Furthermore, they are available in multiple sizes to suit the individual patient.³

GlideScopes are easy to insert due to their curvature, and so are ideal for examining the tongue base. Images can then be viewed on the monitor (Figure 2) and the position of the GlideScope can be altered for the purposes of the biopsy.

- **Tongue base biopsy can be a difficult procedure because the view is obscured by angulation and secretions**
- **The GlideScope[®], which has adequate angulation and an anti-fog system, has been used effectively to view the tongue base**
- **This paper reports a smooth, easy examination and biopsy of the tongue base using this system**

GlideScopes are often used with midazolam for the removal of foreign bodies from the hypopharynx and tongue base (Figure 3), especially in difficult intubations.⁴ There are also descriptions in the literature of GlideScope video laryngoscopes being used for tongue base monitoring, and reduction using radiofrequency.⁵

Conclusion

We believe the use of the GlideScope enables the tongue base to be viewed in an easy and effective way. A review of the literature showed that GlideScope video laryngoscopes have been used to remove foreign bodies from the tongue



FIG. 1
The GlideScope system.



FIG. 2
Endoscopic view of the tongue base with the endotracheal tube (acquired using the GlideScope).

base and hypopharynx. They have also been used in the reduction of the tongue base for the treatment of obstructive sleep apnoea.⁵ However, we believe this is the first time the GlideScope has been utilised for biopsy of the tongue base. This system increased visualisation of the operative site and provided better illumination with a wider viewing angle, which helped to minimise complications. The use of a GlideScope would be helpful during the surgical treatment

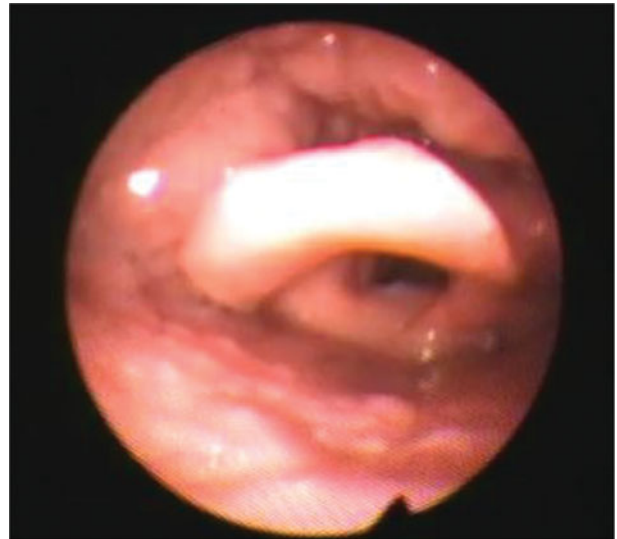


FIG. 3
Endoscopic view of the tongue base without the endotracheal tube (acquired using the GlideScope).

of patients in whom the tongue base is not easily accessible owing to anatomical problems. Following the success of the current case, we recommend the use of GlideScope for future tongue base endoscopy procedures.

Acknowledgement

We would like to offer our sincere thanks to Ms France Carrier for her help with the literature search.

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Dr P K Shenoy takes responsibility for the integrity of the content of the paper

Competing interests: None declared