

Endoscopic stapling of post-laryngectomy neopharyngeal anterior diverticulum

F. R. D'SOUZA, M.B.B.S., M.S., J. J. PHILLIPPS, M.B.B.S., F.R.C.S., D. GUPTA, M.B.B.S., M.S., F.R.C.S.

Abstract

An anterior neopharyngeal diverticulum is a recognized cause of dysphagia following laryngectomy. It is easily treated by endoscopic stapling.

Key words: Pharynx; Diverticulum; Surgical Procedures, Operative; Surgical Staplers

Introduction

An anterior neopharyngeal diverticulum is a recognized entity following total laryngectomy.¹ It can be asymptomatic or can present with symptoms of difficulty in swallowing, regurgitation or foreign body sensation in the throat. Various methods of treatment such as, laser excision of the pouch,² endoscopic division of the pouch wall³ and external surgical repair have been tried in symptomatic patients.⁴ Endoscopic stapling of the pouch although commonly mentioned in the treatment of posterior pharyngeal pouches, has not been mentioned in the treatment of anterior neopharyngeal diverticula.

We present a case which was treated effectively with transoral endoscopic stapling of the neopharyngeal pouch.

Case report

A 60-year-old man underwent total laryngectomy with right radical neck dissection for a pyriform fossa tumour in 1992. He had an uneventful post-operative period followed by a course of post-operative radiotherapy.

Six months later the patient presented with symptoms of dysphagia due to pharyngeal stricture.

He underwent occasional dilatation of his stricture to relieve his symptoms. He was also taught to do regular self-dilatation with mercury bougies from August 1995. Following one episode of self-dilatation in May 1999 the patient developed pain and swelling in the area overlying his neopharynx. The inflammatory symptoms settled down with antibiotics.

However, his symptoms of dysphagia and regurgitation got much worse after this. A barium swallow study was performed, which revealed an anterior neopharyngeal diverticulum (Figure 1). It was thought that this diverticulum had probably been enlarged by the bougie creating a false passage. The patient was treated with transoral endoscopic stapling of the posterior wall of the pouch. The surgery was uneventful and the patient was discharged home the following day. His symptoms completely resolved after the procedure. In fact he states that his swallowing is now the best it has been since before his laryngectomy. Looking retrospectively, the anterior diverticulum was probably a partial cause of his post-operative swallowing difficulties.



FIG. 1
Lateral view of barium swallow, showing anterior neopharyngeal diverticulum (arrowed).

From the Department of Otolaryngology – Head and Neck Surgery, Singleton Hospital, Swansea, UK.
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Discussion

It is probable that the self-bouginate which was carried out by this patient contributed to the development of the diverticulum, and is not a practice to be encouraged. However, having developed the anterior pouch, a technique was needed to improve his swallowing.

Transoral endoscopic stapling of pharyngeal diverticulum is a fairly new technique. It has been increasingly used in the treatment of posterior pharyngeal pouches. Its use in the treatment of anterior neopharyngeal diverticula has not been mentioned. A neopharyngeal diverticulum is quite a common finding following total laryngectomy. If a patient has a swallowing problem after laryngectomy an anterior neopharyngeal diverticulum needs to be considered as a possible cause. Stapling of the party wall between the diverticulum and pharynx should be a safe, easy and quick way of dealing with such a problem.

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Address for correspondence:

Mr J. J. Phillipps, M.B.B.S., F.R.C.S.,
Department of ENT and Head and Neck Surgery,
Singleton Hospital,
Swansea SA2 8QA, UK.

Fax: 01792 285308

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