Is there any role of Barium swallow investigation in patients with Globus Symptoms?

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Abstract

A prospective study of the clinical records and radiological reports of 142 patients with globus pharyngeus, between January 2004 and August 2006, were reviewed and analyzed for correlations between clinical signs and symptoms. In 84 (59.2%) patients, globus was the only symptom. Benign barium swallow findings were detected in 73 (51.4%) patients. In 69 (48.6%) patients, the radiological finding was normal. Statistical analysis using the chi square test showed a significant relationship (P <.001) between symptoms of globus pharyngeus and the barium swallow results. Barium swallow is a useful tool to detect underlying benign pathology in patients with symptom of globus pharyngeus.

Introduction

Globus means “ball” coined by John Purcell and pharyngeus means “throat”, thus “ball in the throat”. Globus is known from the Hippocrates era meaning feeling of something in the throat. In 1968, the term “globus pharyngeus” was introduced by Malcomson to reflect the growing belief that this symptom may have underlying organic causes. 1

Globus pharyngeus is a common benign condition compromising 4% of all the ENT referrals, 2 the management of which is controversial. Theories for globus includes are cricopharyngeal spasm, 3 lingual hypothyrosis, 4 cervical osteophytes, 5 iron deficiency anaemia 6 and gastro esophageal reflux. Recent, gastro oesophageal reflux has been postulated on 24-hour ambulatory pH monitoring of the oesophagus with controversial results. 7, 8 Globus pharyngeus is a benign disorder that requires only reassurance. 9, 10

Barium swallow has been requested on all patients presenting to our department with globus symptoms in order to rule out possible neoplasm and also to investigate the possible aetiology of the patients symptoms.

Methods and Materials

A prospective study of the clinical records and the radiological reports of all patients with globus symptoms, who underwent barium swallow between January 2004 and August 2006 at Gwynedd Hospital following the ethical approval by the local ethics committee. A total of 142 patients were included in the study. All the patients underwent ENT examination including either indirect laryngoscopy or fiberoptic laryngoscopy. Exclusion criteria included head and neck cancer and thyroid pathology. The clinical records and radiological reports of patients were prospectively collected and analysed for correlations between clinical sign and symptoms and barium swallow findings. Statistical analysis was performed using the chi-square test.

Results

Of the 142 patients who underwent a barium swallow, 61 (43 percent) were males and 81 (57 percent) were females with median age of 51 years (range, nine to ninety seven). Out of 142 patients, 84 (59.2%) patients had globus as the main or only presenting symptom. 58 (40.1%) patients had associated symptoms which included acid reflux, heart burn, choking, postnasal drip, hoarseness, persistent cough, dry mouth and non-specific pharyngeal symptoms (figure 1). 73 (51.4%) patients had benign radiological findings. Hiatus hernia and acid reflux were common (figure 2). In 69 (48.6%) patients, the radiological findings of the barium swallow were normal. Barium swallow findings were detected in 73 (51.4%) patients. In 69 (48.6%) patients, globus was the only symptom. Benign barium swallow is a useful tool to detect underlying benign pathology in patients with globus pharyngeus.

Discussion

Barium swallow was performed in all patients diagnosed with globus pharyngeus. 2, 4, 11, 13 Twenty percent of our patients complained of heartburn and barium swallow demonstrated acid reflux in twenty six percent. Back reported acidity in 18.5%, Batch in 15% of the barium swallow while, Caylaki reported reflux in 5.9%. 2, 13

Some authors conclude, that if outpatient examination is adequate, no further investigation of typical globus symptoms is required, as the risk of missing a serious lesion is unlikely (in excess of 1:700). 14, 16

In our series, no serious pathology was detected. Barium swallow was normal in 43.5% of the patients. Benign lesions were detected in 51.4% of the patients. Hiatus hernia (38.1%) was the most common finding followed by the acid reflux (26.7%). Indentation of cervical osteophytes and cricopharyngeal spasm was detected in 21% of patients.

Conclusions

Most patients with globus symptoms have no serious underlying pathology. Barium swallow is a useful investigation to assist in excluding underlying upper oesophageal neoplasm and helpful in detecting benign pathology in patients with globus symptoms.

Bibliography