The diagnosis and management of globus pharyngeus: our perspective from the United Kingdom
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Introduction
Globus pharyngeus, a feeling of something stuck or a sensation of a lump or tightness in the throat, is a well-defined clinical symptom that is persistent, difficult to treat with a tendency to recur. It is a clinical diagnosis and not a diagnosis of exclusion. The presence of ‘high risk’ symptoms such as weight loss, dysphagia, throat pain and lateralization of pathology is the only absolute indication for further investigations [1]. There continue to be anecdotal reports of globus linked to hypopharyngeal cancer – but this association remains rare [2]. Globus accounts for around 4% of otolaryngological referrals and can affect up to 6% of the general population at any time [3]. Patients suffering from this sensory abnormality of the throat have been found to have no higher scores for hysteria than healthy individuals and the term ‘globus hystericus’ has been abandoned. Today, patients are referred usually to laryngologists and gastroenterologists and almost never to psychiatrists, even though globus is the fourth most discriminating symptom of somatization disorder, after vomiting, aphony and painful extremities [4].

Mechanism
The mechanism of this abnormal sensation is that globus can be a manifestation of laryngopharyngeal reflux (LPR) [5] or caused by oesophageal dysmotility [6].

Diagnosis
The diagnosis of globus is based on a detailed history, examination and no or minimal investigations. The history should cover patient’s symptom description and may involve monitoring of symptom progress with validated throat scale questionnaires, specifically designed for globus patients [7]. Important points to identify are the pattern of a throat clearing/dry swallowing cycle, ‘high-risk’ symptoms or patients, associated reflux and psychological history such as major adverse life events, panic attacks and anxiety. Globus is also linked to night-time heartburn, which appears resistant to PPI therapy [8]. Nonetheless, the response of globus to antireflux measures is far from complete, confirming a multifactorial aetiology [9].

Examination should include complete otolaryngological assessment with emphasis on neck/thyroid palpation and

Keywords
globus pharyngeus, laryngopharyngeal reflux, lump, speech therapy, throat
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fibreoptic laryngoscopy, ideally with video facilities for the patient to watch and be reassured that there is no observable abnormality. The introduction of transnasal esophagoscopy (TNE) [10–12] as a diagnostic tool has the potential to offer more extensive office assessment by combining fibreoptic laryngoscopy with evaluation of esophageal pathology, providing a ‘one stop’ diagnostic service. This additional examination will further reduce the need for endoscopy/’reassuroscopy’ under general anaesthesia (with its associated risks of perforation).

Contrast radiological investigations – barium swallow and videofluoroscopy – have little place in the assessment of globus patients. Although they may identify benign esophageal pathology such as hiatus hernia, cervical osteophytes and criophasaryngeal spasm, all of these are very common in the general population. Furthermore, cost effectiveness studies have shown that TNE can be superior to and less expensive than barium swallow in diagnosing esophageal pathology [13].

Dual probe pH studies especially when combined with multichannel intraluminal impedance are the gold standard for patients with persistent globus on antacid treatment [14]. Nevertheless, there is still no consensus regarding the normal values of hypopharyngeal pH and the rate of reflux found in globus patients depends principally on patient selection, ranging from only 15% to nearer 58% [15].

**Treatment options**

Antireflux treatment, speech therapy, relaxation techniques, cognitive behavioural therapy and antidepressants are some of the established options for attempting to treat globus patients.

**Antireflux treatment and evidence base**

There is a lot of scepticism in the otolaryngology community and in primary care surrounding LPR. Globus and other symptoms, such as constant throat clearing, chronic cough, hoarseness, catarrh and choking episodes may be reflux-related [15]. In a British survey of otolaryngologists, attempting to identify current trends in LPR management, it was evident that the most common symptoms (apart from classic heartburn) for which proton pump inhibitors (PPIs) are prescribed are globus (73%), followed by choking episodes and chronic cough [16]. In primary care, PPIs are prescribed for 80% of patients with a primary symptom of heartburn, but for only 2% of globus patients [17].

There are no controlled studies looking at the use of PPIs specifically for globus. Recommendations for the empiric treatment of suspected LPR with PPIs – by far the most common ear nose and throat practice in the United Kingdom [16] – are based on poor levels of evidence from uncontrolled studies [9]. The small volume of level I evidence has failed to demonstrate superiority of PPIs over placebo for treatment of suspected LPR [18], which may reflect treatment resistance – or more likely the fact that reflux can be demonstrated in only a minority of sufferers [9].

In contrast to the earlier mentioned negative results, a recent pilot nonplacebo controlled study attempted to assess the value of non-PPI antacid treatment for suspected LPR (including globus) symptoms. This clinical study did not quantify acid exposure, but assessed response of the Reflux Symptom Index, and the Reflux Finding Score, to a liquid alginate suspension (Gaviscon Advance) compared with control (no treatment). A total of 49 patients were randomized into the open, parallel group study; 24 patients were randomized to receive 10ml liquid Gaviscon four times daily after meals and at bedtime, and 25 patients into the control group (no treatment). Patients were assessed pretreatment and at 2, 4 and 6 months posttreatment. Significant improvement in symptom scores and clinical findings were achieved with Gaviscon compared with no treatment [19].

Of course, the difficulties in treating the atypical manifestations of reflux arise from the inability to accurately diagnose LPR. More randomized controlled trials are required. Until then recommendations will continue to depend on expert opinions and uncontrolled studies. Surgical therapy of severe, drug-resistant reflux remains anecdotaly successful for a range of symptoms, including globus [20].

**Speech therapy/relaxation techniques**

Globus is probably a multifactorial symptom and is often accompanied by other throat symptoms, such as dysphonia, throat clearing and catarrh. Wareing et al. [21] believed that this throat sensation can be caused by excessive pharyngolaryngeal tension, therefore, neck and shoulder exercises to reduce the laryngeal muscle tension general relaxation techniques, together with voice exercises and voice hygiene may be of benefit especially for those whose globus is accompanied by dysphonia. In an attempt to assess the value of speech therapy in globus patients, Khalil et al. [22] recruited 36 patients and randomized them in a speech therapy group and a reassurance group. Outcome measures used were duration and type of globus symptoms, severity of globus symptoms on a visual analogue scale, fibreoptic laryngoscopy, full blood count and barium swallow. At the end of 3 months, patients in both groups marked on the visual analogue scale the severity of their symptoms. There was a significant improvement in the globus
symptom scores in the speech therapy group compared with preintervention scores. There was also a significant improvement in globus symptoms in the speech therapy group compared with controls. The authors concluded that patients with globus pharyngeus might benefit from speech therapy.

Another, small uncontrolled British study [23] of 14 globus patients tracked therapeutic response using the Glasgow and Edinburgh Throat Scale (GETS) [24]. A baseline period was used to assess the pretreatment stability of symptoms. This was followed by a group therapy session and a further reassessment. Videofluoroscopy was conducted before and after therapy. The improved GETS scores after therapy were hard to interpret as there were also improvements seen during the pretreatment observation period. It was thus unclear which aspects of the treatment were effective. Further research is needed to distinguish whether speech therapy has a specific effect or whether globus sufferers benefit from general attention and reassurance alone.

Cognitive behavioural therapy/ antidepressants

Globus patients are rarely referred to psychiatrists or psychologists even though globus is one of the most common discriminating symptoms of somatization disorders [4]. The practice may simply reflect the patients’ reluctance to attend a psychotherapy session but there is established evidence that globus suffers can be depressed or anxious with panic attacks and may have an excess of other previous medically unexplained symptoms [25]. Minor day-to-day ‘hassles’ and/or major adverse life events also appear to be more common in the globus groups [25,26].

In an attempt to rank the levels of evidence a recent metaanalysis of randomized clinical trials on treatment of patients with somatoform disorders and medically unexplained symptoms was performed. Cognitive behavioural therapy emerged as the best-established treatment for a variety of somatoform disorders and medically unexplained symptoms [27]. There has not yet been a substantial trial of CBT in globus patients, despite good evidence of therapeutic efficacy in other medically unexplained symptoms such as irritable bowel syndrome or tinnitus.

Antidepressants for globus have been studied in small series but there is no strong evidence for them. The fact is that most patients are reluctant to start treatment or when they do, tend to discontinue therapy early due to side effects. Some tricyclic drugs though, when used in patients with lower baseline levels of anxiety may be quite effective.

Whatever the underlying mechanism, the majority of globus sufferers describe a vicious circle of throat clearing and dry swallowing. Indeed throat clearing is the most common single symptom endorsed when direct enquiry is made of a voice clinic population [28]. Increasing patient awareness of this phenomenon seems intuitively likely to help break the vicious cycle.

Conclusion

Overall, only if there are atypical features in the history and clinical examination that raise the clinician’s suspicion should any investigations to exclude sinister pathology be embarked upon. Nevertheless, ‘typical’ globus is rarely if ever associated with cancer. Patients whose primary goal is exclusion of cancer may be managed as a ‘one-stop’ clinic visit. The increasing availability of transnasal esophagoscopy at such visits may eventually shed light on the still-uncertain nature of the relationship of reflux and LPR. At the present time, however, it appears that most pharyngeal symptoms benefit little from PPIs, and the optimum therapeutic strategy for globus sensation remains elusive.

References and recommended reading

Papers of particular interest, published within the annual period of review, have been highlighted as:
++ of special interest
+++ of outstanding interest

Additional references related to this topic can also be found in the Current World Literature section in this issue (pp. 000–900).

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This was a well designed systematic review on the value of cognitive behavioural therapy for medically unexplained symptoms.

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