

Original Research Article

Globus pharyngeus a diagnostic challenge for otolaryngologist

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ABSTRACT

Background: Globus pharyngeus, also known as globus sensation, can be defined as the sensation of a lump or foreign body in the absence of a mass on examination. The disorder is frequently linked to catarrh, hoarseness, chronic cough and persistent throat clearing. Globus pharyngeus accounts for 4 percent of ENT (ear, nose and throat) referrals. The exact cause of globus pharyngeus is unknown. The presence of lingual tonsil, cricopharyngeal spasm, hiatus hernia, cervical osteophytosis, sinusitis, gastro-oesophageal reflux, goiter post-nasal drip and anxiety have all been shown as associations in the literature. Digestive enzymes and regurgitation of stomach acid are thought to cause persistent inflammation, for example, of the laryngopharynx, which causes symptoms. Reflux has been depicted in 23-68 percent of patients with globus sensation. Notably, some studies claim that asymptomatic control patients have a similar rate.

Methods: We presented our audit study of 50 subsets of patients. It was considered that gastro-oesophageal reflux was the reason; however, it cannot explain all the potential causes.

Results: Barium swallow was found to be a very key diagnostic tool in this group of patients.

Conclusions: Panendoscopy in globus sensation in the throat, looking through the possible causes of globus sensation, current trends and diagnosis as well as methods of treatment.

Keywords: Diagnosis, Treatment, Globus, Gastroesophageal reflux disease, Proton pump inhibitors, Panendoscopy, Barium swallow

INTRODUCTION

Globus is a non-painful sense of a foreign body or lump in the neck varies significantly in duration. It's a prevalent clinical ailment typically long-lasting, difficult to treat and prone to recurrence. Furthermore, because the origin of globus is unknown, typical research and treatment options for those affected remain a challenge.¹ The presence of lingual tonsil, cricopharyngeal spasm, hiatus hernia, cervical osteophytosis, sinusitis, gastro-oesophageal reflux, goiter post-nasal drip and anxiety have all been shown as associations in the literature. Nasal endoscopy and careful history taking are required as a first step in the treatment of globus.² The recent

discovery that gastroesophageal reflux disease and the benign nature of this condition is a primary cause of globus and patients with typical globus may benefit from empirical treatment with a high dose content of proton pump inhibitors. Manometry, Ph monitoring/multi-channel intraluminal impediment, endoscopy OGD should be considered treatment measures if the patients are not responding to the therapy mentioned above.³ Despite negative investigations, patients who have persistent signs or symptoms may benefit from cognitive-behavioral, language therapy, speech, antidepressants treatment. This symptom frequently improves with eating and is generally unaccompanied by dysphagia. Globus is a relatively well-defined clinical sign and symptom that tends to reoccurrence, difficult to treat and is usually

long-lasting. These signs tend to improve with good eating habits and are in most cases unaccompanied by odynophagia or dysphagia. This condition is very common and it accounts for about 4 percent of the referrals to throat, nose and ear clinics.⁴

Furthermore, this condition is also very prevalent in both men and women, even though women are more likely to seek treatment for these signs and symptoms. Early research focused on the pressure effect of the thyroid cartilage because of the contraction of the strap muscles around the neck. The etiology of this disorder is still not very clear; however, it seems multifactorial. Although there are limited data about the condition, studies have focused on the psychiatric and psychological disorders, abnormalities of the upper sphincter, gastroesophageal reflux diseases and stress as the primary factors resulting in globus sensation. Different etiologies have made it challenging to establish appropriate treatment and investigation strategies for victims of this condition.⁵ The diagnosis and treatment of globus sensation are based on the patient's medical history and physical examination.

A ball or a lump in the neck, throat itching or swelling or itching are all possible descriptions of the presenting ailment. Worsening or consistent signs are more serious than sporadic symptoms. The focus of this research is to discuss the role of panendoscopy in globus sensation in the throat, looking through the possible causes of globus sensation, current trends, and diagnosis as well as methods of treatment.

Role of rigid panendoscopy in globus sensation in the throat

Panendoscopy is a detailed diagnostic test evaluating all subsites of the upper aerodigestive tract, with biopsy and foreign body removal being possible during the procedure. The complications range from post-operative pain and temporary oedema of the tissues, bleeding from biopsy sites but the most serious complication is the risk of oesophageal perforation and its associated morbidity and mortality.

Possible causes of globus sensation

Different etiologies have made developing effective treatment and investigative procedures for patients of this ailment extremely difficult. A detailed history and examination should be undertaken to rule out a sinister cause. Catarrh, hoarseness, chronic cough and continuous throat clearing are common symptoms. Globus pharyngeus is responsible for 4% of all ENT (ear, nose and throat) referrals. It's unclear what causes globus pharyngeus.⁶ The presence of lingual tonsil, cricopharyngeal spasm, hiatus hernia, cervical

osteophytosis, sinusitis, gastro-oesophageal reflux, goiter post-nasal drip and anxiety have all been shown as associations in the literature. Consistent inflammation, such as the laryngopharynx, is caused by digestive enzymes and stomach acid regurgitation, which creates discomfort. In 23-68% of individuals with globus feeling, reflux has been observed.⁷

Notably, some studies indicate that asymptomatic control patients have a rate equivalent to that of symptomatic patients.⁸ Globus sensation of feeling is frequently observed when patients drink, eat or swallow their saliva; therefore, determining the link between swallowing and foods may be beneficial. The pain experienced when swallowing food or drink is not characteristic of the globus sensation.

The aim of study was to look through the possible causes of globus sensation, current trends and diagnosis as well as methods of treatment.

METHODS

A retrospective audit study was conducted in the ENT department of Sligo university hospital. Medical record files of 50 patients were reviewed with complain of foreign body sensations in the throat during (2019-2020). Sample size was calculated using software open Epi. Informed written consent was taken from patients included in this study. Ethical approval was taken from Sligo university hospital. The patients who came to the ENT outpatient department with sticking feeling or sensation in their throats, complaints of pain in their throats, or sensation of a ball or lump in their throats were subjected to clinical examination, which involved laryngoscopy, barium swallow studies and an endoscopy examination with negative result on laryngoscopy in the outpatient department, and no pathological lesion in the esophagus, pharynx or larynx but only revealed images of GERD with congestion of arytenoids cartilages were included in this study. Patients with obvious mass, especially in their upper aerodigestive tracks were equally not incorporated in this study.

Barium studies were done in Sligo university hospital. The procedure began with the patient holding a barium cup with a straw placed inside the cup. With the doctor's instruction, the patient held the barium in the mouth until they received another instruction to follow. The patient then swallowed the barium upon receiving instruction from the doctor and the results were captured and recorded in cine mode in both lateral and frontal projections. As the process continued, spot videos were taken in spot. The esophagus was first examined in the right anterior oblique angle and then moved in the recumbent position. Flow chart diagram explained the study protocol.

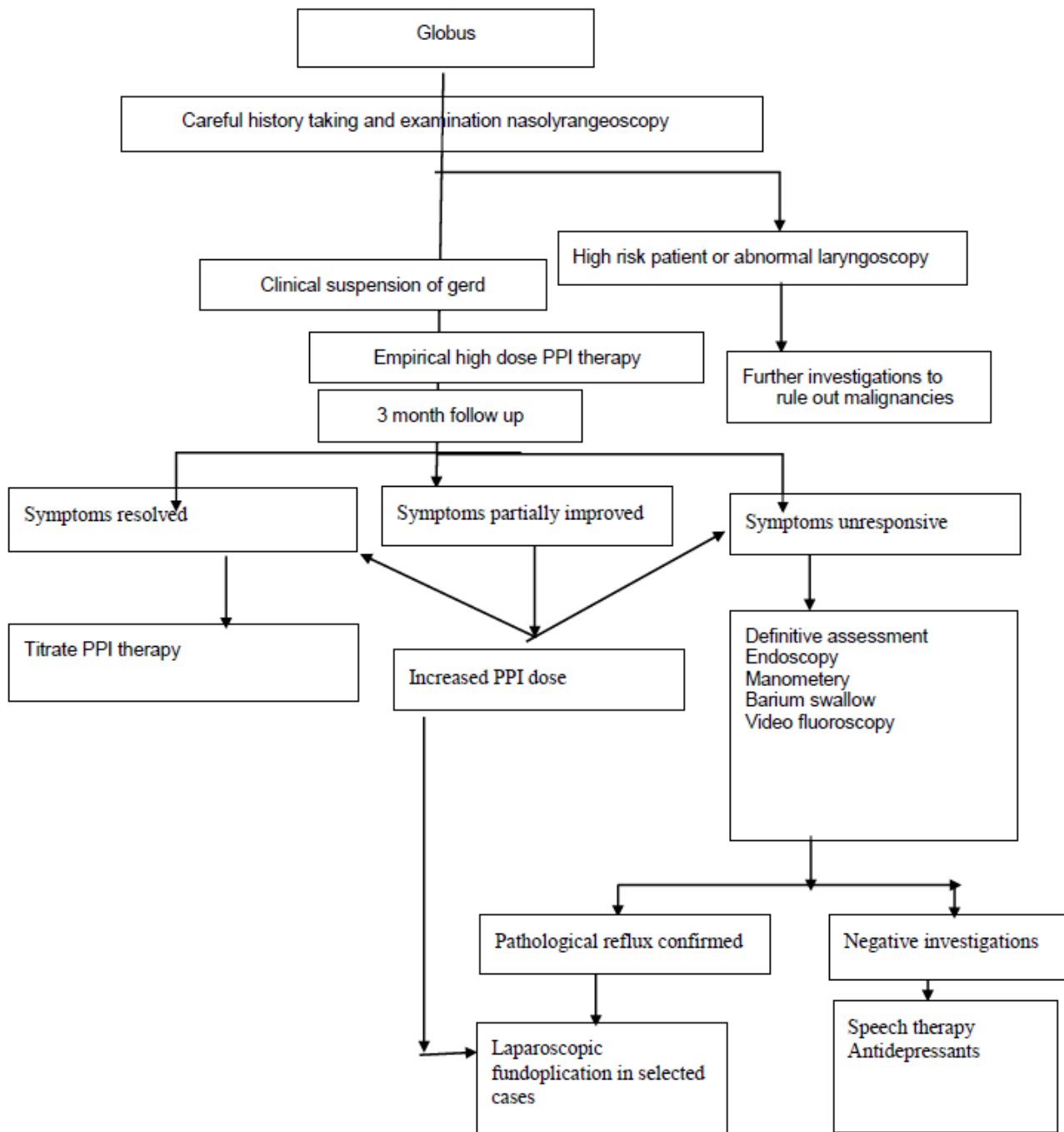


Figure 1: Globus pharyngeus management.

Statistical analysis

The data were evaluated using statistical package version 23.0. A descriptive summary of cross tabs, percentages and frequencies was used to present the study results. A two-tailed probability (P) was then calculated to help determine the statistical significance at the 5% level of significance. Correlation between predictors (sticking sensation in the throat, ball or lump in the throat, foreign body sensation in the throat as well as throat pain) and result variables (abnormal barium swallow and normal

barium swallow) was determined through the help of Chi-square test.

RESULTS

Barium swallow investigations are vital in identifying benign lesions in upto 30.3% of the globus patients. The most prevalent findings of this study being reflux and hiatal hernia, which is about 8-18 percent, cricopharyngeal spasm (2.2 percent) and cervical osteophytes (0.4-23 percent). However, considering the

ubiquity of these findings in the larger population, linking these findings was difficult. In two trials, barium scanning failed to detect any cancer in globus patients. No esophageal or pharyngeal malignancies were discovered in a study of 50 barium swallows in patients with globus.

Over twelve months, 50 subjects were again studied. All of them were subjected to barium swallow cross-examination. Out of the 50 patients, 57% were females, while 43% of them were males. The mean age of the sample population was about 39.95 years. The result revealed that barium swallow was normal in about 41 subjects and abnormal in 9 subjects (Table 1). Out of the normal barium swallow cases, 16 experienced throat pains, 12 experienced sticking sensations in their throats, 15 experienced a feeling of a lump in their throats and 7 experience a burning sensation in their throats. Many of

these subjects were diagnosed with globus and few had laryngitis/pharyngitis or GERD.

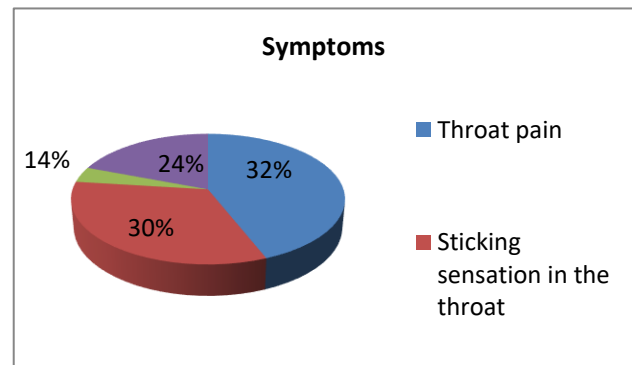


Figure 2: Symptoms.

Table 1: Characteristics of patients and barium swallow results (n=50).

Parameters		Frequency	Percentage (%)
Mean age (years)		39.95±11.94	
Gender	Male	43	43
	Female	57	57
Barium swallow	Normal	41	82
	Abnormal	9	18

Table 2: Correlation between barium swallow and clinical symptom findings (n=50).

Symptoms		Barium swallow finding		P value
		Normal	Abnormal	
		N (%)	N (%)	
Throat pain	Present	16 (39.6)	0 (0)	0.0024
	Absent	55 (60.4)	9 (100)	
Sticking sensation in the throat	Present	12 (23.1)	6 (66.7)	0.011
	Absent	70 (76.9)	3 (33.3)	
The feeling of ball or lump	Present	15 (34.1)	7 (77.8)	0.025
	Absent	60 (65.9)	2 (22.2)	
Burning sensation	Present	7 (15.4)	0 (0)	0.352
	Absent	77 (84.6)	9 (100)	

Out of the nine subjects that showed abnormal findings when subjected to barium swallow, 66.7% (6) showed sticking sensation, 77.8% (7) had a feeling of a ball or lump in their throats. In contrast, zero had the experience of burning sensation or pain in their throats. There was a statistical association, for example, ($p < 0.05$) between clinical symptoms and barium swallow as demonstrated in Table 2.

DISCUSSION

Globus pharyngeus is a persistent and painless condition that was relatively challenging to treat. Most of its symptoms were usually relieved when the patient was eating. The condition was not commonly associated with dysphagia or odynophagia, even though it was a

widespread disease. Furthermore, the condition did not have a definite etiology; however, several aetiological factors have been proposed to be causing this condition. Catarrh, hoarseness, chronic cough and continuous throat clearing were all attributed to the symptom of the condition.⁹ Research revealed that globus pharyngeus was responsible for 4% of all ENT referrals. It had been reported to affect up to 46% of individuals who have experienced the condition. It was not unclear what caused globus pharyngeus. The presence of lingual tonsil, cricopharyngeal spasm, hiatus hernia, cervical osteophytosis, sinusitis, gastro-oesophageal reflux, goiter post-nasal drip and anxiety have all been shown as associations in the literature. Some studies also indicated that asymptomatic control patients have a rate equivalent to that of symptomatic patients.¹⁰ Globus sensation of

feeling was frequently observed when patients drank, ate or swallowed their saliva; therefore, determining the link between swallowing and foods may be beneficial. The pain experienced when swallowing food or drink was not characteristic of the globus sensation. According to the findings, globus pharyngeus was a serious ailment that affected many people in developing countries. According to the findings of this study, a barium swallow was a useful approach for treating patients with globus pharyngeus. This study demonstrated the efficacy of barium swallow in patients with globus; for example, in patients with globus had been highlighted in this study.

CONCLUSION

As we have seen from this discussion, the globus is a non-painful sensation in the neck triggered by a foreign body or lump that might remain for days or weeks. It's a common clinical ailment that's usually long-term, difficult to treat and prone to recurrence. Because the cause of globus is unknown, traditional research and therapy choices for those affected are limited. As a first step in the therapy of globus, a nasolaryngoscopy and a thorough medical history are required. The new finding that gastroesophageal reflux illness is a key cause of globus and the benign character of this condition suggests that individuals with typical globus may benefit from empirical treatment with proton pump inhibitors in large doses. If the patients do not respond to the therapy mentioned above, manometry, Ph monitoring/multichannel intraluminal impediment, and OGD endoscopy should be investigated as treatment options. Despite negative tests, patients who have chronic signs or symptoms may benefit from cognitive-behavioral therapy, language therapy, speech therapy and antidepressant medication.

Furthermore, results in depict globus pharyngeus as a severe illness that affects a large number of people. According to the findings of this research, barium swallow is a useful method that can be used to provide care to patients suffering from globus pharyngeus. The utility of barium swallow, for example, in patients with globus has been proven in this study. It is recommended that a barium swallow examination be performed on patients suffering from globus, after which further therapy can be arranged even though the study entails radiation exposure and the possibility of aspiration; barium swallowing aids in soothing the patient and relieving pain.

Recommendations

The findings of this study highlighted the need for researchers to conduct relatively more high-quality, evidence-based empirical studies to have a better understanding and knowledge about the role of panendoscopy in globus. Information is scarce in this field; therefore, this study added to the literature and the body of knowledge. However, the relatively smaller

sample size and obtaining patients from a single health facility have a significantly limited generation of this study's results. With the expanding number of patients suffering from globus, the matter needed an immediate solution. This study provided some important information to help health care providers treat this condition.

A barium swallow study was recommended for people suffering from globus, following which additional treatment can be planned. Even though the investigation involves exposure to radiation and the risk of aspiration, barium ingestion helped calm the patient and relieve pain. As mentioned earlier, a manometer, Ph monitoring/multichannel intraluminal impediment and O.G. endoscopy should be considered treatment alternatives if the patients do not respond to the therapy. Patients experiencing persistent signs or symptoms, although negative tests, may benefit from cognitive-behavioral treatment, language therapy, speech therapy and antidepressant medication.

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