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Editorial

Globus pharyngeus

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Summary:
Globus pharyngeus, also called Globus Pharyngis, is feeling of a person that something remains in throat and/ or a sensation of a mass or tightness in the throat. The term comes from the Latin globus, a ball. This is a common ENT condition in general practice. Globus may be persistent or intermittent, and usually non-painful. It is usually long-lasting, difficult to treat, and has a tendency to recur. Furthermore, due to the uncertain etiology of globus, it remains difficult to establish standard investigation and treatment strategies for affected patients. As a first step for managing globus, careful history taking and nasolaryngoscopy are essential. All known throat conditions shuold be excluded before coming to diagnosis of Globus Pharyngis. Given the benign nature of the condition and the recent notion that gastroesophageal reflux disease is a major cause of globus, If patients are nonresponsive to conventional therapy, definitive assessments such as endoscopy, multichannel intraluminal impedance/pH monitoring, and manometry should be considered. Speech and language therapy, anti-depressants, and cognitive-behavioral therapy can be prescribed.

Purpose of review:
There is no standard protocol of management of globus pharyngeus. Regular study of the recent developments of the condition is important to help patients whose symptoms persist despite unnecessary numerous investigations.

Epidemiology:
Globus accounts for around 4 percent of otolaryngological referrals. 8-45 percent of the general population has mild, intermittent symptoms resembling globus at some time in their lives. The peak incidence of the symptom is in middle age; the globus symptom is very uncommon in patients under the age of 20 and adolescents are much more likely to experience eating disorders than globus sensation. Older people can complain of globus sensation, but it is often difficult to differentiate this from age-related mucosal inflammation.considered a disease of women. The everyday experience of globus is reported more or less equally by both sexesalthough from those seeking medical attention, three of four subjects are women.

Introduction:
In the past, globus was described as *globus hystericus* because of its frequent association with menopause or psychogenic factors In 1968, after discovering that most patients experiencing globus did not have a hysterical personality, the more accurate term 'globus pharyngeus' was coined. The etiology remains elusive. Although data are limited, previous studies investigated links with gastroesophageal reflux disease (GERD), esophageal dysmotility, abnormalities of the upper esophageal sphincter temporo-mandibular joint dysfunction pharyngeal inflammation enlarged lingual tonsils, upper aerodigestive malignancy, psychological factors, and stress. As globus cannot be assessed by clinical examination, there is a

validated questionnaire, the Glasgow Edinburgh Throat Scale (GETS) that can appraise with high probability the incidence and severity of globus. From the aspect of otorhinolaryngologist, the most important connection of the globus is with thyroid diseases and laryngopharyngeal reflux (LPR). LPR is known as direct irritation and inflammation of the laryngopharynx by retrograde flow of gastric contents.

Reflux Finding Score (RFS), a Quantitative Guide for diagnosis and treatment of Laryngopharyngeal Reflux. This validates morphological changes of laryngeal mucosa, which occur as the result of LPR and can be demonstrated by direct laryngoscopy. The changes of the larynx can include subglottic edema, ventricular obliteration, erythema/ hyperemia, vocal fold edema, diffuse laryngeal oedema. Each of the mentioned parameters is separately evaluated and the possible score range is from 0 (normal) to 26 (worst possible score). RFS >7 indicates a diagnosis of LPR. Some other diagnostic methods for detecting LPR are contrast radiology, 24-hour pH-monitoring, and multichannel intraluminal impedance (MCII). All these methods are invasive and they are used in cases when empirical treatment fails.

The medication depends on suspected aetiological factors, and in LPR treatment is proton pump inhibitor (PPI). Besides patients suffering from LPR, globus pharyngeus also occurs in 30% of patients with thyroid pathology. The patients with globus symptom that underwent thyroidectomy had the following thyroid diseases, i.e. multi-nodular and colloid goiter, follicular adenoma, carcinoma, and thyroiditis.

A wide variety of explanations, physical and psychological, had some popular theories of the past include strap muscle spasm, hypertrophy of the lingual tonsils, sinusitis, anterior cervical osteophytes, overclosure of the bite, granular pharyngitis tonsillitis and thyroid nodules. Despite the high prevalence in the community, the aetiology of globus remains unclear and highly controversial. It is slowly being accepted that it may be multifactorial and that when it occurs in isolation it rarely hides any sinister pathology. Most of the recent work has suggested several mechanisms in isolation or not uncommonly in combination are psychological factors, gastro-esophageal reflux (GOR), pharyngeal dysmotility, hypertonic upper oesophageal sphincter (UOS), and local anatomic abnormalities. There is a list of rare conditions including Esophageal motor disorders, chronic sinusitis, Upper aerodigestive malignancy, Hypertrophy of the base of the tongue, Retroverted epiglottis, Rare laryngo-pharyngeal tumors, Psychological factors and stress. There have been numerous isolated case reports that have suggested an association of globus with cervical osteophytes, temporomandibular joint disorders, hyperviscosity of the nasopha-ryngeal mucosa, Eagle's syndrome, excessive laryngeal and pharyngeal tension, and salivary hypofunction.

Diagnosis:

The diagnosis of globus sensation is not difficult for an experienced physician or Otolaryngolocal surgeon. Detailed history, physical examination is required but but investigative procedures or methods should be minimal. Clinician only needs to have high index of suspicion. History should focus on the patient's description about his/her description. They describe Globus in many ways. Patient often describe it as foreign body sensation in throat. They mention it as a hair, a piece of skin, a blob of catarrh or a choking sensation, as well as the classic ball-like lump in the throat. True dysphagia and odynophagia are usually absent, as is weight loss. The

sensation is typically maximal between meals and may well disappear with eating, leading the patient to eat more and gain weight. However, at least one in five patients will note persistence of the abnormal sensation during deglutition. Globus is more troublesome at the end of the working day, probably because, like tinnitus, patients have more time to focus on their problems. Patients will often admit to repeated dry swallowing and throat clearing, if specifically asked.

A symptom assessment scale to grade the severity of symptoms can be useful, particularly during patient follow up. The major elements of the syndrome are the sensation of something stuck, a discomfort or irritation and a continual sense of wanting to swallow. Elderly male smokers are not the typical globus patients and high index of suspicion is required to exclude sinister disease, such as pyriform fossa cancer. In a nonsmoking female patient, the only common head and neck squamous cancer is a post-cricoid lesion and this is usually found in elderly, iron-deficient patients and again is associated with true alteration in eating patterns. Examination should include complete otolaryngological assessment with emphasis on neck palpation and flexible laryngoscopy, which, if combined with video facilities for the patient to watch, can often reinforce reassurance that the laryngopharynx, while feeling abnormal to the patient, has no observable abnormality. Radiological swallow investigations, such as barium studies, are typically normal and add nothing to the typically shows at most minor nonspecific pharyngeal abnormalities like cricopharyngeal indentations. It is more valuable to reinforce the message that globus is essentially a sensory disturbance, like itching and tinnitus, than to expose the patient to unnecessary radiation exposure. Investigations, furthermore, may exacerbate the situation, as they tend to 'medicalize the patient's disease' and raise fresh anxieties. Even if negative, this may not, as the optimistic clinician hopes, reassure the patient, but rather make her or him feel that the doctor is looking for something that is eluding detection. The historical habit of using direct endoscopy under general anaesthesia to evaluate unselected globus patients should now be abandoned. Flexible pharyngoscopy in the outpatient clinic is superior, cheaper and safer. The issue of possible reflux disease is better assessed by other means (therapeutic trial of antacids, flexible oesophagoscopyor pH-metry). Where the relevance of reflux remains in doubt, there may be benefit from the administration of pH-metry in conjunction with a modified symptom index. IS Only if there are atypical features in the history and clinical examination that raise the clinician's suspicion should any additional investigations to exclude Patients with typical features of globus pharyngeus usually require no other investigation beyond an nasolaryngoscopy. However, patients with some alarming features such as dysphagia, odynophagia, throat pain, weight loss, hoarseness, should undergo more extensive evaluation to exclude malignancy

Management:

Reassurance is important and can, as stated above, be rendered more real for the patient if the otolaryngologist takes time to demonstrate the image of the relevant areas at flexible endoscopy on the video monitor. A strong history of gastrooesophageal reflux may respond to a powerful antacid, such as omeprazole as Shaw and Sear demonstrated in a study of 96 patients with laryngeal manifestations of reflux. However, it is difficult to predict success rates from antereflux therapy as at least 30 percent of globus patients suffer from reflux. The small volume of level 1 evidence on empiric treatment of

reflux has failed to demonstrate superiority of proton pump inhibitors over placebo, suggesting that laryngopharyngeal reflux may perhaps be a self-limiting condition. If there is no symptomatic response to antacids, then either reflux is not relevant, or no longer relevant (even if acting as an initiator) or there is much slower response of cervical reflux symptoms to antacid than of dyspepsia, for unknown reasons.This last explanation is often cited by enthusiasts for the 'reflux hypothesis' of cervical symptom generation - but of course there is no evidence that such a slow 'response' is anything other than part of the natural history of the condition.

Antidepressants have been used for the treatment of globus, but in small series. The early reaction to tricyclic drugs often includes a phase of heightened anxiety, causing many patients to discontinue therapy. In the small number of patients with low neuroticism scores and lower baseline levels of anxiety, however, there is some evidence that tricyclic antidepressants can actually be effective in resolving the symptom. There appears a learned response to stress causing increased tone in the muscles of the neck leading to a sense of a pressure at the front of the throat. Thus, relaxation training, acupuncture treatment and hypnotherapy have been used with some encouraging results. The vicious circle of dry swallowing and throat clearing should be explained. As with all vicious circles, it is a question of breaking it sufficiently for a new pattern of behaviour to be acquired. Once aware of this it can be controlled through a drink or yawn with the aim of eliminating it very quickly. Wearing et al. believed that globus sensation might be associated with excessive laryngeal and pharyngeal tension. Strategies used in their study included careful assessment, especially of life stresses with additional symptoms of dysphonia and throat clearing, neck and shoulder exercises to reduce the laryngeal muscle tension and general relaxation techniques. Adequate rehydration and voice exercises and advice, together with avoidance of cigarette smoking and alcohol intake can help particularly when globus is accompanied by dysphonia.

Follow up and prognosis:

Globus pharyngeus is an abnormally persistent symptom and is difficult to treat. Care must be taken in outcome evaluation, to distinguish between improvements in the intensity of globus sensation and unchanged symptom levels, but with much lower levels of concern and 'throat awareness'. Much has been written about the aetiology of globus, but there are only few reports of the long-term follow up and prognosis of patients with globus sensation. Mair et al. S suggested that the sensation may persist at two years in 85 percent of women and 95 percent of men. Wilson et al, 29 in a follow-up study of 104 patients, concluded that, although there is a reduction in occult psychiatric morbidity in patients with the globus sensation over time, underlying personality traits remain stable and that there is a remarkable persistence of pharyngeal symptoms. Symptoms persist for at least two years in the majority of patients with more severe complaints and last as long as seven years in 45 percent of subjects. The persistence of symptoms for years, even at a low level, should be explained to patients during consultation. It is perhaps more cost-effective to follow up and reassure patients in an outpatient setting rather than arrange forexpensive and often negative investigations which, although reassuring for the clinician, often increase the patient's anxiety by creating the impression that something has been missed. A specialized 'globus clinic', if facilities permit, is often very helpful because it gives the opportunity for patients to meet

with other 'sufferers' and realize that their symptoms are quite common!

Conclusion:

Globus is not a diagnosis of exclusion, this is a clinical diagnosis. A complete head and neck examination including fibreoptic laryngoscopy is enough to discharge a patient having the classic globus pharyngeus. The introduction of Trans nasal oesophagoscopy in one stop globus clinics and in selected cases complete a thorough upper aerodigestive tract examination means that an otolaryngologist can nowadays can manage completely without doing oesophagoscopies under general anaesthesia. Overinvestigating these patients can often add unnecessary stress to a group of patients who already seem to have higher levels of depression, anxiety, and other somatic concerns. Panendoscopy under GA is an unnecessary effort for standard globus assessment.

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