

Reflux Associated Pharyngitis: An Underestimated Phenomenon

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ABSTRACT

It is globally accepted that refluxed stomach contents causes troublesome symptoms and/or complications. This disease can present with local or remote manifestations. The established problems like cough, laryngitis, asthma, sinusitis, etc ascribable to reflux has met more emphasis in research work, however, the proposed association of chronic pharyngitis appears to be underestimated. In the present study we present and share our experience with 25 patients having peptic pharyngitis over a period of one year. 10 patients had acid peptic pathology already confirmed prior to examination while the other 15 were unaware of reflux disorder.

Keywords: Barium swallow, endoscopy, peptic pharyngitis

INTRODUCTION

ENT specialists are often confronted with symptoms which are related to laryngopharyngeal reflux. Reflux oesophagitis which is characterized by heartburn and regurgitation is common and rank next to duodenal ulcer as a source of gastrointestinal symptoms¹. Besides the typical presentation of heartburn and acid regurgitation, either alone or in combination, gastroesophageal reflux disease (GERD) can cause atypical symptoms. An estimated 20 to 60 percent of patients with GERD have otolaryngological symptoms without any appreciable heartburn. The GERD is responsible for remote extraesophageal presentations like cough, hoarseness, asthma, recurrent pneumonia, pharyngeal or oral diseases, chest ache, nocturnal cough and obstructive apnea^{2,3,4}. Gastroesophageal reflux is defined as the movement of gastric contents into the esophagus without vomiting. Laryngopharyngeal reflux is the movement of gastric contents into the laryngopharyngeal area. Gastroesophageal reflux disease (GERD) occurs when gastric contents including its acid, pepsin, bile acid and pancreatic enzymes, irritate mucosal surfaces of the upper aerodigestive tract resulting in irritation and injury of esophageal or other tissues which are not adapted to the presence of such noxious materials..

SUBJECTS AND METHODS

This study was conducted at ENT dept of services institute of medical sciences, services hospital, Lahore from April 2008 to May 2009. All patients having persistent sore throat and associated heart burn were further examined and investigated by barium swallow and endoscopy or both.

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RESULTS

Twenty five patients were screened to have heart burn and symptoms of hyperacidity from those complaining of sore throat through one year. 17 of them were males, 08 were females, age range from 30 to 45 years, 10 of them were known cases of acid peptic disease but not on regular therapy while the other 15 were unaware of the primary diagnosis although they had symptoms. All of them came to ENT department searching for treatment without having in mind any relation to their heart burn and hyperacidity, considering it as a non-treated condition. Seven cases showed reflux esophagitis on barium swallow while 3 had hiatus hernia on barium swallow. 15 patients showed esophageal manifestations of reflux on endoscopy. Two cases had a previous report of history of peptic ulcer. All patients obtained marked improvement on frequent light meals, avoidance of fats, and on maintenance, they were put on antacid therapy, but some of them still have intermittent attacks of sore throat related to there hyperacidity, the treatment of which now they know and they will not visit the ENT surgeon for it any more.

DISCUSSION

Chronic nonspecific pharyngitis is one of the most common reasons for visits to otorhinolaryngologists. Chronic sore throat is one of the annoying conditions to both the patient and the physicians and it could be secondary to many conditions. Everyday we meet patients with chronic pharyngitis who are searching for a cure for years and we investigate them for an underlying cause. One of these causes is reflux esophagitis which can cause both esophageal and extraesophageal manifestations as the paryngeal mucosa is not accustomed to the gastric juice with its enzymes and acids. Contencin et al⁵ stated that cases of chronic or recurrent pharyngolaryngitis are

mostly secondary to gastroesophageal reflux and they demonstrated the presence of acid reflux at the level of the pharyngolarynx by continuous monitoring of level of pH. In our study we didn't have the facility of pH monitoring. Zaidi⁶ has stated in his research work that there was a high cure rate in intractable pharyngitis by prescribing H₂ receptor antagonists as compared to traditional antacids (p<0.001). In our study, peptic pharyngitis improved by diet control and antacids. Few studies had evaluated the results of proton pump inhibitors on distal and proximal pH recording using a dual-channel probe. In one of such studies patients received treatment with pantoprazole which lead to reduction in the frequency and severity of gastroesophagopharyngeal acid reflux in patients with chronic pharyngitis⁷. In an other study patients were assessed by the use of the reflux finding score (RFS) and reflux symptoms index (RSI). The RSI of the nonspecific pharyngitis group was found significantly higher than the control group (P<0.01)⁸. An electron microscopic ultrastructural study of oropharyngeal epithelium of such patients showed dilatation of intercellular spaces essentially at the squamous basal and suprabasal levels in their oropharyngeal biopsy specimens, whereas none of the control subjects showed such a morphological marker. Dilatation of intercellular spaces as a morphological marker can be traced in patients with laryngopharyngeal reflux (LPR) and sore throat at the level of the oropharynx. This contributes to a better understanding of the pathophysiology of LPR.⁹ In an open-prospective study twenty-four hour esophageal pH-monitoring was performed and it was observed that proximal reflux is frequent in patients with chronic pharyngitis or laryngitis. Proximal reflux episodes are correlated to distal acid exposure and associated with a better esophageal clearance¹⁰. The prevalence of gastroesophageal reflux disease (GERD) in patients with laryngopharyngeal disorders is probably greater than realized. A total of 92 patients were evaluated in a study¹¹ over a two year period. ORL diseases and symptoms at presentation were chronic laryngitis, chronic pharyngitis, globus pharyngeus, globus and chronic laryngitis, laryngeal carcinoma, cricopharyngeal spasm and throat hawking. History of symptoms of peptic ulcer disease and regurgitation was obtained in 47.8% and 65.2% respectively. Endoscopic findings revealed esophageal reflux with gastroduodenitis in 4.3%, non specific gastritis in 17.4%, duodenal ulcer in 56.4%, and normal findings in 21.7%. Patients were treated medically with antacids, H₂ antagonists, proton pump inhibitors and were followed up for 9-12 months. GERD was diagnosed in 4(4.34%),

68(73.9%) were diagnosed as non erosive reflux disease (NERD) and 20 (21.74%) with probable acid related problem that will need further evaluation. Following anti-reflux therapy 68 (73.9%) had disappearance of their laryngopharyngeal symptoms for up to a year. ORL complications of GERD / NERD was seen in 72 (78.3%). Gastro-oesophageal reflux disease (GERD) covers a broad range of signs and symptoms arising from the orad movement of gastric contents into the oesophagus, oropharynx, larynx or airway. However, GERD can also give rise to extra-oesophageal manifestations such as pharyngitis, laryngitis, asthma and other disorders, identifiable as acid-mediated events by a favorable response to acid suppression.

CONCLUSION

Our study showed that reflux is a common cause of chronic pharyngitis. It should be considered in patients with prolonged symptoms as well as those with associated heart burn or esophageal spasm. Many patients seek advice for the treatment of their recurrent sore throat and a search is indicated of which peptic pharyngitis is an important and treatable cause.

REFERENCES

1. Bate C. Reflux Oesophagitis. *Prescriber* 1991;19:63-76
2. Pealman NW, Stiegmann GV, Teter A., Primary upper aerodigestive tract manifestation of reflux. *Am J Gastroenterol* 1988;83: 22-25
3. Buts JP, Barundi C, Moulin D, Claus D, Cornue G, Otte JB. Prevalence and treatment of silent gastroesophageal reflux in children with respiratory disorders. *Eur J Pediatr* 1986;145:396-400.
4. Trotox J, angelard B, aubert P, Manifestations of gastroesophageal reflux. *Rev prat* 1989;39:291-93.
5. Contecin P, Adjoua P, Viala P, Erminy M, Narcy P, Long term esophageal and oropharyngeal pH monitoring in ORL manifestations of gastroesophageal reflux i children. *Ann Otolaryngol Chir Cervicofac* 1992;109:129-133
6. Zaidi SH. A study of H₂ receptor antagonists n the reatment of chronic intractable pharyngitis. *J Pak Med Assoc* 1990;40;217-219
7. Karoui S, Effect of pantoprazole in patients with chronic laryngitis and pharyngitis related to gastroesophageal reflux disease: clinical, proximal, and distal pH monitoring results; *Dis Esopagus*;2010 May;23(4):290-5.
8. Yazici ZM, Sayin I, Kayhan FT, Biskin S. Laryngopharyngeal reflux might play a role on

- chronic nonspecific pharyngitis. Eur Arch Otorhinolaryngol. 2010 Apr;267(4):571-4.
9. Amin SM, Abdel Maged KH, Naser AY, Aly BH Laryngopharyngeal reflux with sore throat: an ultrastructural study of oropharyngeal epithelium Ann Otol Rhinol Laryngol. 2009 May;118(5):362.
 10. Karoui S, Zouiten L, Serghini M, Sahtout-Jouini S, Matri S, Kallel L, Boubaker J, Filali A. [Proximal gastro-esophageal reflux monitoring in patients with suspected laryngopharyngeal reflux disease] Tunis Med. 2008 Aug;86(8):735-9.
 11. Somefun OA, Wanda CB, Adesanya AA, Thomas MO, Esan OO, Otolaryngologic manifestations of gastro-oesophageal reflux disease Laryngorhinootologie. 2008 Dec;87(12):867-9.