

Understanding the long-term complications of untreated gastroesophageal reflux disorder.

Maureen Afaneh*

General and Oncologic Surgery Department, Centre of Bariatric Surgery, Italy

Introduction

Gastroesophageal reflux disorder (GERD) is a chronic condition characterized by the backward flow of stomach acid into the esophagus, leading to symptoms such as heartburn, regurgitation, and chest discomfort. While many individuals manage GERD with lifestyle changes and medications, untreated GERD can lead to serious long-term complications. Understanding these potential complications is crucial for motivating proper management and treatment of the condition [1].

One of the most significant long-term complications of untreated GERD is esophagitis, which is the inflammation of the esophagus. Continuous exposure to stomach acid can irritate and damage the lining of the esophagus, leading to swelling, erosion, and ulcers. This inflammation can cause pain, difficulty swallowing (dysphagia), and bleeding. Chronic esophagitis may also result in the formation of strictures, which are narrowings of the esophagus caused by scar tissue. Strictures can further complicate swallowing and require medical intervention, such as dilation procedures, to restore normal esophageal function [2].

Barrett's esophagus is another serious complication that can arise from untreated GERD. This condition involves the replacement of the normal squamous cells lining the esophagus with columnar cells typically found in the intestine, a change known as intestinal metaplasia. Barrett's esophagus is considered a precancerous condition because it significantly increases the risk of developing esophageal adenocarcinoma, a type of cancer. Regular monitoring through endoscopic examinations is essential for individuals with Barrett's esophagus to detect any early signs of cancerous changes [3].

Untreated GERD can also lead to esophageal strictures, caused by repeated injury and healing of the esophageal lining. The scar tissue that forms during the healing process can cause the esophagus to narrow, leading to difficulty swallowing and a sensation of food getting stuck. This condition can significantly impact a person's ability to eat and maintain proper nutrition. Treatment for esophageal strictures often involves endoscopic dilation, where a balloon or dilator is used to widen the narrowed area of the esophagus [4].

One of the most severe complications associated with long-term untreated GERD is esophageal cancer. Chronic

exposure to stomach acid can lead to cellular changes in the esophagus, increasing the risk of both adenocarcinoma and squamous cell carcinoma. Esophageal cancer is often diagnosed at an advanced stage, as early symptoms can be subtle and easily overlooked. Symptoms such as progressive difficulty swallowing, unexplained weight loss, chest pain, and persistent cough should prompt immediate medical evaluation. Early detection through regular monitoring in high-risk individuals, such as those with Barrett's esophagus, is crucial for improving outcomes [5].

Dental erosion is another potential complication of untreated GERD. Stomach acid that refluxes into the mouth can erode tooth enamel, leading to increased sensitivity, cavities, and other dental issues. Regular dental check-ups and maintaining good oral hygiene are important for individuals with GERD to prevent dental complications [6].

In addition to these direct complications, GERD can have systemic effects on overall health and quality of life. Chronic discomfort and pain from GERD can lead to sleep disturbances, resulting in fatigue and decreased productivity. Persistent symptoms may also contribute to anxiety and depression, as individuals struggle to manage their condition and its impact on daily activities [7].

Pulmonary complications can also arise from untreated GERD. Aspiration of stomach acid into the lungs can lead to chronic cough, asthma, and even aspiration pneumonia. This occurs because the acid irritates the airways and lungs, leading to inflammation and respiratory issues. Managing GERD effectively is essential for individuals with asthma, as acid reflux can exacerbate asthma symptoms and complicate treatment [8].

Laryngopharyngeal reflux (LPR) is another complication where stomach acid reaches the throat and larynx, causing symptoms such as hoarseness, chronic throat clearing, cough, and a sensation of a lump in the throat. LPR can lead to laryngeal inflammation and vocal cord damage if not properly managed [9].

GERD can also lead to other health issues such as sinusitis and chronic ear infections. The acid reflux can cause inflammation and swelling in the sinuses and Eustachian tubes, leading to sinus infections and middle ear infections. These complications can cause significant discomfort and may require medical intervention to manage effectively [9].

*Correspondence to: Maureen Afaneh, General and Oncologic Surgery Department, Centre of Bariatric Surgery, Italy. E-mail: maureen@cbs.itl.in

Received: 25-Jun-2024, Manuscript No. JGDD-24-142697; Editor assigned: 26-Jun-2024, Pre QC No. JGDD-24-142697(PQ); Reviewed: 10-Jul-2024, QC No. JGDD-24-142697;

Revised: 15-Jul-2024, Manuscript No. JGDD-24-142697(R); Published: 22-Jul-2024, DOI: 10.35841/jgdd-9.4.213

Moreover, GERD can affect nutritional status. The discomfort associated with eating can lead to reduced food intake and poor nutritional absorption. Over time, this can result in weight loss, malnutrition, and deficiencies in essential vitamins and minerals. Ensuring adequate nutrition through a balanced diet and, if necessary, nutritional supplements is crucial for individuals with chronic GERD [10].

Conclusion

Untreated GERD can lead to a range of serious long-term complications, including esophagitis, Barrett's esophagus, esophageal strictures, esophageal cancer, dental erosion, pulmonary complications, and laryngopharyngeal reflux. By taking proactive steps to manage GERD through lifestyle modifications, medications, and medical interventions, individuals can reduce their risk of complications and improve their overall quality of life. Regular follow-up with healthcare providers and adherence to treatment plans are crucial for preventing the long-term complications of untreated GERD.

References

1. Chen J, Brady P. Gastroesophageal reflux disease: pathophysiology, diagnosis, and treatment. *Gastroenterol Nurs.* 2019;42(1):20-8.
2. Patti MG. An evidence-based approach to the treatment of gastroesophageal reflux disease. *JAMA surgery.* 2016 Jan 1;151(1):73-8.
3. Fass R, Boeckxstaens GE, El-Serag H, et al. Gastro-oesophageal reflux disease. *Nat Rev Dis Primers.* 2021;7(1):55.
4. Ravindran A, Iyer PG. Gastroesophageal reflux disease and complications. *Geriatr Gastro.* 2020:1-7.
5. Winter HS, Illueca M, Henderson C, et al. Review of the persistence of gastroesophageal reflux disease in children, adolescents and adults: does gastroesophageal reflux disease in adults sometimes begin in childhood?. *Scand J Gastroenterol.* 2011;46(10):1157-68.
6. Banting SP, Badgery HE, Read M, et al. Rethinking gastroesophageal reflux disorder. *Ann N Y Acad Sci.* 2020;1482(1):177-92.
7. Salvatore S, Vandenplas Y. Gastro-oesophageal reflux disease and motility disorders. *Best Pract Res Clin Gastroenterol.* 2003;17(2):163-79.
8. Galmiche JP, Des Varannes SB. Symptoms and disease severity in gastro-oesophageal reflux disease. *Scand J Gastroenterol Suppl.* 1994;29(201):62-8.
9. Orenstein SR, Izadnia F, Khan S. Gastroesophageal reflux disease in children. *Gastrointest. Endosc. Clin. N.* 1999;28(4):947-69.
10. Williams JF, Sontag SJ, Schnell T, et al. Non-cardiac chest pain: the long-term natural history and comparison with gastroesophageal reflux disease. *Am J Gastroenterol.* 2009;104(9):2145-52.