Chest pain of oesophageal origin

Definition

Chest pain can be caused by diseases of the heart, lungs, chest wall etc., but is often related to the oesophagus. The clinical picture of oesophageal pain disorders depends on the factors responsible for their development. In some diseases such as erosive oesophagitis (erosion of the gullet), excess acid exposure is thought to be the main pathophysiological factor. In contrast, functional chest pain symptoms are believed to be caused by hypersensitivity without evidence of physical disease.

Incidence

Gastro-oesophageal reflux disease (GORD) is very common with no gender predilection and frequently gives heartburn and chest pain. 25% of the population experience symptomatic GORD at some point with approximately 5-10% having symptoms on a daily basis. Other organic oesophageal diseases, such as motility disorders and achalasia, are rare, whereas functional (or non-cardiac) chest pain is very prevalent, being reported in 10-25% of the population. The majority of these patients are females.

Clinical Features, natural history and prognosis

The GORD diagnosis is based on retrosternal pain and regurgitation. If pain is present it has typical localisation behind the breastbone, but referred pain to the abdomen, neck and back is frequently seen. Natural history and prognosis depends on the pathogenesis. Most patients with reflux disease have intermittent symptoms, whereas functional chest pain seems to improve over time.

Aetiology and Pathophysiology (Causes)

GORD is caused by reflux of acid or other harmful substances such as bile into the oesophagus. In many cases this results in erosions, but more frequently nothing can be seen during endoscopy. Hiatal hernia, obesity and medication can increase acid reflux, but in many patients there are no obvious factors explaining the symptoms. In functional diseases, it is believed that sensitization of peripheral nerves and the central nervous system are causing the pain and other symptoms.

Diagnosis/Differential Diagnosis

A detailed interview is essential for an accurate diagnosis. Frequently used tests include pH monitoring, X-ray of the chest and barium swallows, manometry and oesophago-gastroduodenoscopy.

Therapy

The main therapy for GORD is suppression of acid secretion with proton pump inhibitors and other similar drugs. In chronic cases, or when complications related to reflux disease are identified, surgical treatment (fundoplication) may be necessary. Cessation of smoking or weight loss is helpful but otherwise the effects of life-style modifications are poorly documented. In functional disorders symptomatic treatment with analgesics and adjuvant therapy is often used.

References

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Internet Resources

http://emedicine.medscape.com/article/176595-overview
http://en.wikipedia.org/wiki/Gastroesophageal_reflux_disease