



A REVIEW ON MENETRIER'S DISEASE

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ABSTRACT

Gastric mucosal hypertrophy, also known as Menetrier's disease, is more common in men over 50 years of age and the cause is unknown. This disease is mainly located in the fundus of the stomach and the body of the stomach. This also involves the antrum of the stomach. The symptoms include hypoproteinemia and edema, in some cases epigastric pain, weight loss and diarrhea also accompanies.

KEY WORDS

Gastric mucosa, hypertrophy, helicobacter pylori, Menetrier's disease

INTRODUCTION

Menetrier's disease (MD), also known as giant hypertrophic gastritis or hypoproteinemic hypertrophic gastropathy, is a rare form of acquired, idiopathic hypertrophic gastropathy and was characterized by gastric hypertrophy, hypoalbuminemia and massive gastric folds. MD is associated with excessive secretion of transforming growth factor alpha. This was first described in 1888 by French pathologist Pierre Menetrier in an autopsy. Four cases of MD were reported by Dr. Menetrier and these were mainly located in the fundus and body of the stomach. Two cases were combined with gastric cancer.

Main manifestations of MD are the proliferation of epithelial cells in the gastric mucosa, the deepening of the gastric pit, the proliferation of mucous cells in the pit, the atrophy of the glands and the increase in the ratio of gastric pit to glands.

SYMPTOMS OF MD:

Clinical symptoms includes anorexia, epigastric pain, nausea, weight loss, gastrointestinal bleeding, diarrhea, vomiting, fatigue and peripheral edema.

EPIDEMIOLOGY:

The average age of onset is 40 to 60 years. Men are more affected than women. A childhood form of the disorder exists younger than 10 years.

CAUSES OF MD:

The exact cause is unknown. In children, the disease may be associated with cytomegalovirus (CMV). In adults, bacterium *Helicobacter pylori* has been implicated.

The large folds of the stomach are easily detected by x-ray imaging following a barium meal or by endoscopic methods. Endoscopy with deep mucosal biopsy are done for diagnosis. A non-diagnostic biopsy may exclude malignancy.

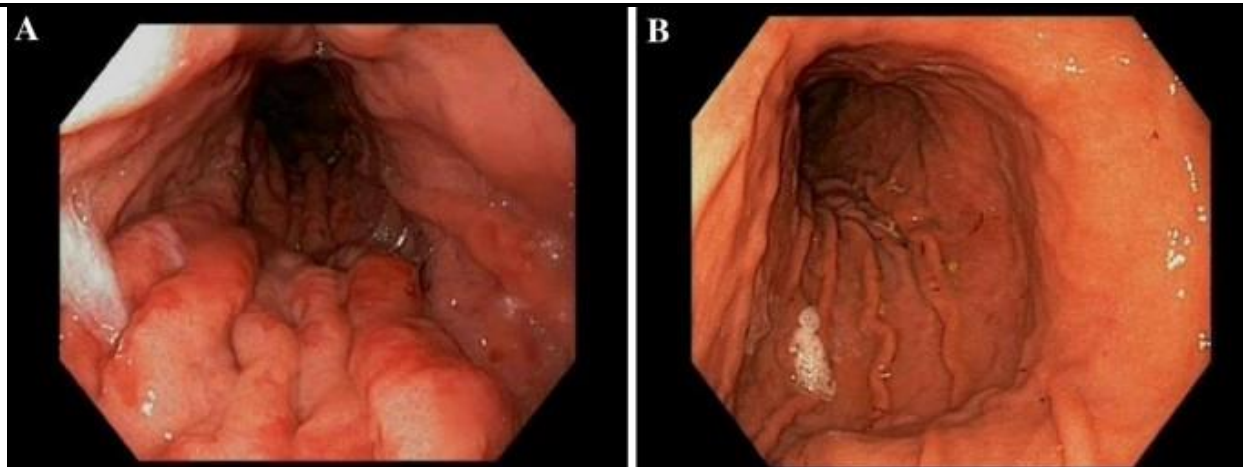
PATHOLOGY

Large, convoluted gastric folds in the fundus and body, with the antrum typically spared, are signs of Ménétrier illness and give the mucosa a cobblestone or cerebriform (brain-like) appearance. The greatest distinguishing hallmark on a histological level is extensive foveolar hyperplasia (hyperplasia of surface and glandular mucous cells). The glands have a corkscrew-like shape and are elongated; cystic dilatation is frequent. The majority of the time, inflammation is quite mild, while some cases exhibit prominent intraepithelial lymphocytosis. Hypoplasia of parietal and main cells, which is indicative of diffuse or patchy glandular atrophy, is usual.

Ménétrier disease is not regarded as a type of gastritis, despite the fact that ICD-10 categorises it as "Other gastritis" (K29.6) and the lamina propria may have a minor chronic inflammatory infiltration. It is actually regarded as one of the two hypertrophic gastropathies that is best understood, along with Zollinger-Ellison syndrome.

DIAGNOSIS VIA FLUOROSCOPY

- Upper GI fluoroscopy includes enlarged and tortuous folds in the fundus and body mainly along the greater curvature with sparing of the antrum
- Due to mucus hypersecretion, barium is diluted and this leads to impaired mucosal coating



DIAGNOSIS VIA CT SCAN

Gastric walls thickness will be normal between folds. The areas of thickened mucosa will appear as thickened rugae that may project into gastric lumen to a degree which resembles convolutions of brain.



TREATMENT

Anticholinergic medications, acid suppression therapy, and antibiotic treatment for *H. pylori* infection have all been used to treat Menetrier illness. The outcomes of these treatments have been erratic. A high-protein diet may be suggested in some circumstances to stop protein loss. Transfusions of albumin may also be used to replenish lost albumin.

TREATMENT WITH MONOCLONAL ANTIBODY

The first-line treatment for Ménétrier's disease

should be cetuximab. It is a one month course treatment.

Infusions of cetuximab (Erbix) have proved effective in treating some Menetrier disease patients by blocking the epidermal growth factor receptor. Treatment with cetuximab can enhance quality of life, restore gastric acid production, and perhaps even lessen stomach wall thickness. Occasionally, after ceasing cetuximab treatments, the patient continues to be healthy, if only temporarily. Patients who are receiving the therapy Erbix must be closely watched because it has the potential to cause cardiac arrest, an acne-like rash, and low magnesium levels.

SURGICAL TREATMENT

Partial or total gastrectomy may be required in extreme situations, such as those with considerable protein loss or a high likelihood of progressing to gastric cancer. The surgical removal of all or a portion of the stomach is known as a gastropasty.

Antiviral drugs that target CMV may alleviate symptoms in kids with Menetrier disease associated with cytomegalovirus infection.

CONCLUSION

The disease is relatively rare and the cause is unknown. The mucus is hugely thickened, the lesions are limited to mucus layer so that morphology changes after compression. Gastroscopy can be performed, when the identification is difficult and confirming the diagnosis depends on the pathological examinations. The understanding of the disease had to be improved which will reduce the risk of misdiagnosis.

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