Gastric outlet obstruction due to inflammatory fibroid polyp



Ann. Ital. Chir., 2006; 77: 59-61

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INTRODUCTION: Inflammatory fibroid polyp (IFP) is a rare mesenchymal tumor of the gastrointestinal tract. The lesion is characterized by spindle-shaped stromal cells and an inflammatory infiltrate rich in eosinophils.

CASE REPORT: The AA. present a case of the IFP of the stomach. A 85 years old woman was admitted to the hospital for early vomiting and epigastric pain.

The patient underwent a gastroduodenoscopy that revealed a polipoyd lesion mimicking cancer of the antrum and subtotal obstruction of the gastric transit.

CONCLUSIONS: The Endoscopic Ultrasound Sonography suggested the presence of a lesion of the submucosal layer such as lymphoma or other type of malignancy like gastrointestinal stromal tumor (G.I.S.T.).

KEY WORDS: Gastric obstruction, G.I.S.T., Inflammatory fibroid polyp.

Introduction

Inflammatory fibroid polyps (IFP) are a rare type of mesenchymal tumor of the gastrointestinal tract. Helwig and Rainer proposed the term "IFP" to indicate that they were probably "inflammatory" in nature ¹. These tumors occur mainly in the stomach as localized polyps and in the other tracts of intestinal walls.

The etiology and histogenesis of IFP are unknown. The first description of this tumor is due to Vanek in 1949 ². This lesion was attributed to a reparative process ³. The large presence of eosinophils in this type of lesions advocated allergic or parassitic infections and for long time this type of etiology has been advocated ^{4,5}. Immunohistochemical and ultrastructural studies have not yet clarified the histogenesis.

The gastric inflammatory pseudotumor is positive for vimentine (18/18) and CD34 (15/18) (Fig. 4).

In contrast to gastrointestinal stromal tumor genetically no substitution, deletion or insertion occurred in c-kit exon 11 in all analized samples ⁶.

Furthermore no deletion or insertion in part of c-kit exon 9 was observed. Complete resection of tumor has been advocated for both diagnostic and therapeutic purposes ⁷.

Recurrence is possible.

Case report

We present a case of pseudotumor (or inflammatory tumor) of the gastric wall.

A 85 years old women was admitted to our department for weight loss associated with reduction of food intake, early vomiting and epigastric pain.

The patient underwent a gastroscopy that revealed a polypoid lesion apparently similar to a cancer of the antrum. CT scan revealed increased thickness of gastric wall in the antrum. Gastrointestinal transit study revealed sub total obstruction of gastro-duodenal transit.

Biopsies were performed and specimens were negative for adenocarcinoma. The patient underwent an echoendoscopy that showed an increase of wall thickness with disorder of wall layers components.

This investigation suggested the presence of a lesion in the submucosal layer such as lymphoma or other type of malignancy like gastro-intestinal stromal tumor (G.I.S.T.). Patient outlet obstruction symptoms increased, so that we decided to perform an explorative laparotomy. A

Pervenuto in Redazione Gennaio 2005. Accettato per la pubblicazione Ottobre 2005.

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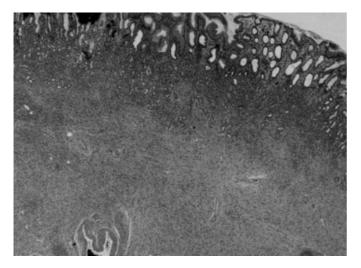


Fig. 1: E.EOX100 Pyloric Wall with normal mucosa layer and diffuse thickening of submucosa layer.

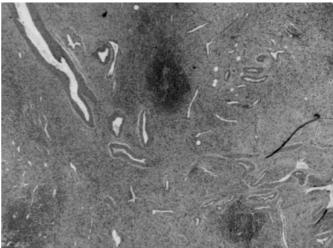


Fig. 2: E.EOX100 Pyloric Wall: Lymphocytic Inflammatory Infiltrates.

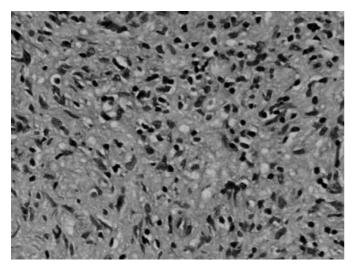


Fig. 3: E.EOX400 Histological Focus: Numerous Eosinophil Granulocyte.

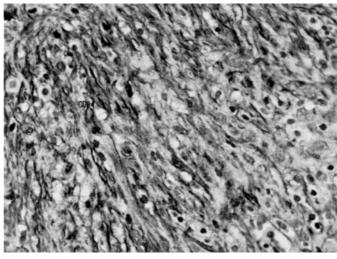


Fig. 4: Vimentine CD34 Immunohistochemical Staining: Diffuse Positive Response.

gastric resection with gastrointestinal reconstruction according to Roux procedure was performed.

No complication occurred in the post operative period. The patient was discharged eight days after the surgical procedure on normal diet regimen. She referred non impaired digestion.

The specimen showed gastric wall with very prominent spindle mesenchymal cells (Fig. 1). There were no mitosis or atypical cells. Infiltration of eosinophil cells and lymphoid isles can be observed (Fig. 2 and Fig. 3). All this findings are compatible with the diagnosis of Gastric Pseudotumor.

Discussion

Despite the nature and the etiology of lesion wich were considered unknown, the pseudotumor is to be consi-

dered benign neoplastic tissue rather than inflammatory or reactive lesion ⁸.

On the other hand, the clinical recurrence and acquired clonal chromosomal abnormality with aberrant or exaggerated response to tissue injury suggest the neoplastic character of this lesion ⁸.

Many reports by current literature involve the description of this kind of lesion but only a few report a clear etiology.

The specimens evaluation showed to be completed and, with the employment of antibody and immunohistochemical staining methods, evidence for dendritic cell origin has been evidenced ².

The gastric inflammatory pseudotumor is positive for vimentine (18/18) and (15/18); in contrast with the features of gastrointestinal stromal tumors genetically no substitution, deletion or insertion occurred in c-kit exon 11 in all analysed samples.

Furthermore no deletion or insertion in part of c-kit exon 9 was observed ².

The differential diagnosis is with eosinophil gastritis, myofibroblastic inflammatory tumor.

Complete resection of tumor is mandatory. Recurrence when resection margin are involved is reported, then a wide margin of excision is mandatory.

The prognosis is good if the margin of resection is disease free.

Conclusion

The inflammatory fibroid polyps of the stomach are benign neoplasm. The clinical presentation and preoperative investigation is not diagnostic. The preoperative biopsies during gastroduodenoscopy are often negative and not supportive in suggesting a therapeutic choice. The treatment is surgical resection of the tumor and both chemiotherapy and radiotherapy are not active on the disease.

Complete resection represents the gold standard of the treatment.

Riassunto

Il polipo fibroide infiammatorio (L'IFP) è un tumore mesenchimale raro del tratto gastroenterico. La lesione si caratterizza per la presenza di cellule stromali fusate con un infiltrato di tipo infiammatorio ricco di eosinofili. Presentiamo un caso di IFP dello stomaco.

Si tratta di una donna di 85 anni che è stata ricoverata presso il nostro reparto per vomito e dolore epigastrico. La paziente è stata sottoposta a gastroscopia che ha rilevato una lesione polipoide dell'antro gastrico determinante occlusione parziale del transito. L'ecoendoscopia ha evidenziato una lesione della sottomucosa come si rileva ne linfoma, nel tumore gastrointestinale stromale (GIST) e nel polipo fibroide infiammatorio.

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