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Association of Chronic Inflammatory Bowel Diseases and Celiac Disease

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ABSTRACT

The association of celiac disease with inflammatory bowel diseases is rare. it was basically described as clinical cases. This is usually an hemorrhagic rectocolitis. The purpose of our study is to assess the prevalence of CD in patients with IBD and to describe the topographic and phenotypic and progressive features of IBD in patients with CD. We report a new observations.

Keywords : Association, Celiac Disease - Chronic inflammatory bowel diseases

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INTRODUCTION

Inflammatory bowel diseases (IBD) result from chronic activation of the mucosal immune system under the influence of genetic and environmental factors. They include Crohn's disease and UC, and are characterized by chronic inflammation of the lining of the digestive tract (1) .Celiac disease is defined by a permanent intolerance of the intestinal mucosa to gluten .It manifests itself by a syndrome of clinical and biological malabsorption, related to total or subtotal villous atrophy of the proximal small intestine, and regressing after gluten exclusion (2,3).

The association Inflammatory chronic diseases of the intestine (IBD) and celiac disease (MC) has been exceptionally described in the literature in the form of small series or even boxes report. The etiopathogenesis of this association is complex and not known; several hypotheses have been evoked however none has been confirmed.

The association of the two pathologies is rarely described. We report cases with this association.

MATERIALS AND METHODS

The study was retrospective, focused on 5 cases of CM associated with IBD, recruited in 5 years (June 2012 - June2018). The diagnosis of MC was established on the determination of specific auto antibodies, as well as a high digestive endoscopy with histopathological study of duodenal biopsies. That of the IBD was focused on a bundle of clinical, endoscopic, radiological, histological and evolutionary arguments. All patients were on a gluten-free diet for life and specific treatment for IBD.

RESULTS AND DISCUSSION

The frequency of the MC-MICI combination was 2.5%.

The mean age at the time of diagnosis of CD was 27 years (22-36 years), that of IBD was 38 years (23-40 years); we noted a clear female predominance with a sex ratio H / F = 0.16. No pathological personal or familial antecedent notable in all cases.

The diagnosis of both conditions was concomitant in 4 patients, that of CM preceded that of IBD in one case.

Three patients had Crohn's disease, 2 of whom had an ileocecal location, one patient had pancolitis with anoperineal manifestations. Two patients had a UC, one of whom had a left rectocolonic localization and the other had a pancolitis.

The clinical picture was dominated by chronic diarrhea in all cases, followed by abdominal pain and weight loss which were noted in 4 cases. Extradigestive manifestations were dominated by osteoarticular pain in 4 cases.

Biological abnormalities suggestive of malabsorption: a deficient microcytic hypochromic anemia; hypo-albuminemia, hypochlesterolemia, hypoprotidemia, hypocalcemia, hypophosphoremia, and a deficiency in B12 were observed in 3 cases.

Anti-transglutaminase and / or antiendomysium IgA antibodies were present in all cases.

The endoscopic aspect was suggestive of MC in two cases: Rarification of folds

Duodenals, a mosaic appearance in one case (Figure 1), and normal in 2 cases (Figure 2).

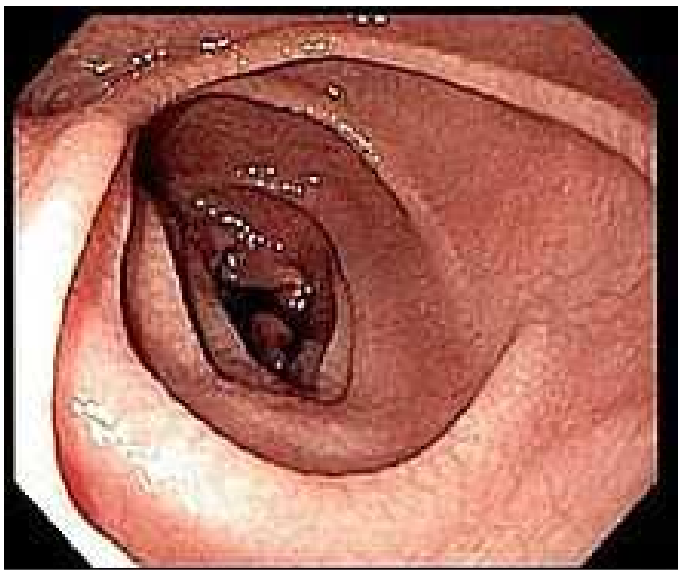

Figure 1: Duodenal appearance in mosaic

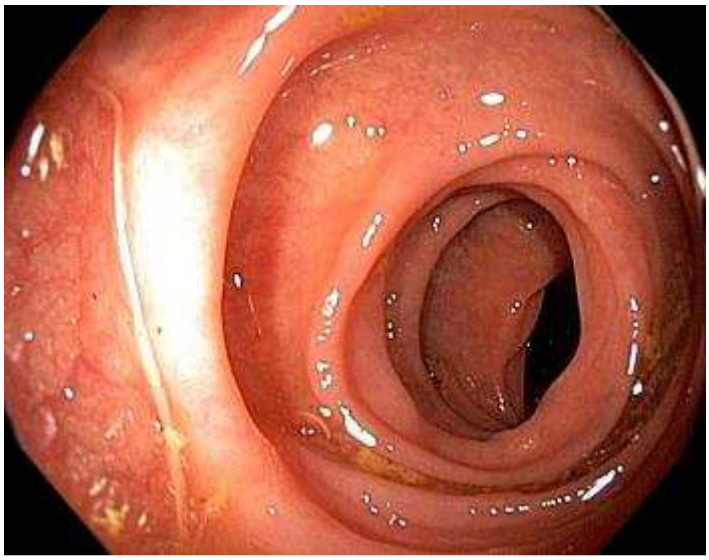

Figure 2: Normal duodenal appearance

The histopathological study of duodenal biopsies revealed stage 3 of Marsh-Oberhuber in all cases.

In our series, the Gluten Free Diet (GSR) was prescribed in all our patients, once the diagnosis is retained. A written list of prohibited products was given to them. It was explained to them that it was a life-long treatment and that even small deviations could be detrimental to their health, associated with corticosteroid treatment adapted to the severity of the disease outbreak and a background treatment. of MICI. Iron supplementation has been prescribed for patients with iron deficiency anemia. Calcium supplementation has been prescribed for patients with hypocalcemia.

The average duration of follow-up was 2 years [1-4].

Good progress was observed in four patients with cranial disease, with clinical improvement marked by a decrease in the number of diarrhea, regression of the anemic syndrome and weight gain, and moderate relapses of UC in one patient. However, the serologies of celiac disease were not realized (lack of means). As for the endoscopic and histological explorations, a good evolution was noted in 4 patients and a therapeutic failure in the two other patients (by poor compliance). of the scheme)

Discussion

Inflammatory bowel diseases (IBD) that can affect the entire digestive tract and evolve by interrupted episodes of remission The diagnosis of IBD is based on several criteria: clinical, biological, endoscopic, histological and progressive treatment [1].

Ceoliaque disease (MC) is defined by an intolerance of the intestinal mucosa to gluten [2], is manifested by a syndrome of clinical and biological malabsorption and total or subtotal villous atrophy of the proximal small intestine and regressing after food exclusion. gluten. It may be associated with other autoimmune disorders: herpetiform dermatitis, insulin-dependent diabetes, IgA deficiency, dysthyroidism, primary biliary cirrhosis (4).

The association of celiac disease with inflammatory bowel diseases is rare, it has been reported mainly in the literature as clinical cases (1). It is most often a RCH (5,6), L The association of celiac disease with Crohn's disease accounts for only 20% of cases (7). In our series, the association of CD with Crohn's disease was the most frequent, contrary to the literature data.

the prevalence of celiac disease, during cranial disease is low (6), it is of the order of 0.5%, this prevalence would remain lower than the population. The incidence is maximal in the young adult, with a peak of incidence between 20 and 30 years. Family forms have been described as well in the [8] as in the general ceoliaque disease.

This association is essentially an etiopathogenic problem, several hypotheses have been declared:

The association of CD and cranial disease could be a fortuitous association (9). However, familial forms have been described in both CM [8] and in cranial disease [9], suggesting intervention in each of these two affections of genetic factors.

IBD and celiac disease are responsible for a type I immune response, particularly by involvement of T-type intra-epithelial cells (10). Both are characterized by a decrease in cellular apoptosis that induces inflammation. A more interesting hypothesis incriminates the increase in intestinal permeability, the latter has been described during IBD, it could be related to the action of TNFα, and could cause bacterial translocation as a consequence of bacterial growth. The increase in intestinal permeability has also been described during MC, caused by the reduction of zonulins (11).

A particular genetic predisposition that may explain this association was evoked by Cotonne et al. A more recent genetic study conducted by Garrett Lawtor et al also confirmed this association genetic link (9), which described three cases in three Sicilian families. , having implicated mutation of the MYO IXB gene in both patients with CD and those with IBD, this gene codes for myosins that contribute to cytoskeletal integrity, cell polarity and intercellular junctions. The mutation of this gene would result in an alteration of the intestinal permeability, which would expose many pathologies including MC and IBD (8,9).

The clinical diagnosis of the combination is difficult, since both pathologies can be manifested by diarrhea, abdominal pain, weight loss (14)

The diagnosis of this association is very often fortuitous discovery, on the occasion of the persistence of diarrhea in patients with IBD, not responding to treatment with a different corticosteroid (13). The diagnosis of certainty of the MC is based on the combination of the following arguments: Anti-gliadin and anti-endomysium antibodies; frequent association of CD with other autoimmune diseases (2). However, the diagnosis of IBD is based on several criteria: clinical, biological, endoscopic, histological and evolutionary on treatment; infiltration of the chorion by gliadin-specific CD4 T lymphocytes (3).

The treatment of the association of CD with IBD is not well codified according to the data of the literature. treatment was based on a gluten-free diet associated with the treatment of IBD according to the type of IBD, the severity of the thrust, and the location (15,6,7).

In our observations, all patients were put on a gluten-free diet, combined with corticoid treatment adapted to the severity of the attack.

CONCLUSION

The association of CD with IBD is rare.
Through this work and literature data, it is concluded that the aetiopathogenesis of this association is complex especially genetic, and the need for systematic screening of celiac disease in patients with IBD by performing a high endoscopy with duodenal biopsy, at the initial colonoscopy of IBD, and an exhaustive digestive balance in cases of therapeutic resistance in patients with IBD.

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