



Fig. 1. (a) Mucosal edema and nodular formation of the second part of the duodenum. (b) Duodenum biopsy revealed villous atrophy, inflammatory infiltration and increased intraepithelial lymphocytes.

formation of the second part of the duodenum (Fig. 1a). Biopsies revealed villous atrophy, moderate inflammatory lymphoplasmatic cell infiltration, eosinophils, a small number of neutrophils and increased intraepithelial lymphocytes in places (Fig. 1b). Serum anti-tissue transglutaminase (TTG) IgA and anti-anti-endomysial antibodies were negative and IgA immunoglobulin was 130 mg/dl (normal).

Interestingly, our patient improved after the start of gluten-free diet (GFD), with a suspicion of immunotherapy-associated celiac disease. Patient was discharged and 3 months later immunotherapy restart was discussed.

Immunotherapy-associated celiac disease has been reported to improve with GFD, steroids alone or in combination with infliximab [2,3]. Badran *et al.*[4] categorized patients with CPI-associated duodenum inflammatory infiltration in those with celiac disease or duodenitis. CPI-associated celiac disease was defined as duodenitis with positive serum anti-TTG IgA and CPI-associated duodenitis was defined by negative serum TTG IgA antibodies. In this case series, CPI-associated duodenitis patients required steroids alone or in combination with infliximab. In our patient, CPI-associated duodenitis improved with gluten withdrawal.

Whether our patient had celiac disease before the immunotherapy start or immunotherapy was the cause of an immunogenetic condition resulting in duodenitis remains unknown. The last could be more probable considering that he had hypothyroidism and microscopic colitis the same time. Some questions are raised about the diagnosis of a probable celiac disease. Could immunotherapy affect the detection of the known serum antibodies for diagnosis? Furthermore, could human leukocyte antigen DQ2 and DQ8 provide more information? Could gluten be a triggering factor the withdrawal of which could help the mucosal to heal?

Gluten withdrawal is a cheap and easily performed choice and seems worthwhile trying it in patients with anti-TTG IgA-negative duodenitis who are refractory to steroids.

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Conflicts of interest

There are no conflict of interest.

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SARS-COV2 and eosinophilic esophagitis: a first case

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Since it was initially reported on 31st December 2019, the disease known as coronavirus disease (COVID-19) has spread across the globe, and Italy was the first European country to face the consequences.

The clinical and psychological impact of COVID-19 infection in eosinophilic gastrointestinal diseases (EGID) patients in Italy has been described. All consecutive EGID patients attending the University Hospital of Salerno and Padua filled an ad hoc COVID-19 survey. The study population included 102 EGID patients, of whom 89 had eosinophilic esophagitis (EoE), nine had gastroenteritis, and four had colitis. No patient was diagnosed with COVID-19 or had recurrence of his/her primary disease [1].

Other Italian authors observed that none of the 36 adult patients with EoE living in Siena and its Province were hospitalized or referred for COVID-19 infection between March and June 2020 [2].

Some reports indicate that atopy does not represent a risk factor for COVID-19 severity [3].

We described the first case of COVID-19 infection in a 21-year-old EoE patient.

He was diagnosed with EoE in 2011. He was affected also by allergy to lentils and showed some episodes of oral allergy syndrome with different fruit and vegetables (tomato, peanut, soy, apple).

It was then demonstrated sensitization to lipid transfer protein (Pru p3 2.94 kU/l), while sensitization to specific food storage protein, PR-10 (Bet v1 0.01 kU/l) and Profilin (Bet v2 0 kU/L) was excluded.

On 16th October, the patient started complaining of asthenia, headache, anosmia and loss of taste.

The diagnosis of COVID-19 infection was then confirmed with molecular assay of nasopharyngeal swab.

The infection then affected the cohabiting parents in the following days. The mother was the only one who needed hospitalization for respiratory assistance.

Before the infection, he was following therapy with oral viscous budesonide: 15 ml twice a day (2 mg/10 ml) for 5 months and he was following a legumes-free diet.

The patient then discontinued budesonide therapy and received azithromycin therapy (500 mg per day for 5 days). He never needed respiratory assistance or oxygen therapy.

He performed other two nasopharyngeal swabs and the negativity for *E* gene, *RdRP/S* gene and *N* gene was demonstrated on 8th November 2020.

To our knowledge, this is the first case of COVID-19 in EoE patient.

Eosinophils, for a long time identified as an effector cell in allergic diseases, recently has been postulated to play a potential role in antiviral responses. Several data indicate that patient with severe form of COVID-19 show a trend towards eosinopenia, leading to consider this condition a biomarker of poor prognosis; on the other hand, the higher proportion of activated eosinophils that characterized allergy may play a protective role [4].

In our patient's last blood count, about 5 months before the infectious event, the peripheral blood eosinophil count was in the normal range ($0.46 \times 10^3/\mu\text{l}$; 4.8% of white blood cells).

Our case is the only one among a total of 125 EoE patients (0.8%), followed by EoE task force of our hospital.

It should be remembered that worse prognoses of COVID-19 are more frequent in older patients than the average age of EoE patients.

In Italy, data from Istituto Superiore di Sanità (data updated on 16th December 2020) shows that the median age of patients' positive for COVID19 is 48 years and that the median age of patients who died with the same condition is 82 years [5].

It is therefore appropriate to moderate excessively optimistic immunological conclusions for patients with EoE, but it is possible just to describe a more reassuring reality.

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Earlier use of fecal transplant administration during hospitalization for *Clostridioides difficile* infection may improve outcome

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To the editor

The use of fecal microbiota transplant (FMT) has revolutionized the management of recurrent and refractory *Clostridioides difficile* infection (CDI), with success rates of over 85% being reported in clinical studies [1]. We aimed to compare the outcomes between nonimmunocompromised and immunocompromised patients who underwent inpatient FMT for CDI in a large tertiary care