

Case Report

Digestive Neoplasms in Adult Celiac Disease: two Case Reports and Literature Review

Nada Boutrid^{1,2}, Hakim Rahmoune^{1,2*}, Mounira Amrane^{2,3}, Soraya Ouhida^{2,4}, Djamel Abdellouche⁴, Belkacem Bioud^{1,2}, Abderraouf Bataiche⁵, Naouel Lemdaoui⁵

¹Department of Pediatrics, University Hospital of Setif, Setif 1 University, Algeria

²Genetic, Cardiovascular & Nutritional Diseases Laboratory, Setif-1 University, Algeria

³Laboratory, CAC-Setif, Setif 1 University, Algeria

⁴Department of Pathological Anatomy, University Hospital of Setif, Setif 1 University, Algeria

⁵Department of Surgery "B", Ben Badis University Hospital of Constantine, Constantine-3 University, Algeria

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Abstract: Celiac disease (CD) is associated with an increased risk for malignancy, especially digestive adenocarcinoma and lymphoproliferative neoplasms. We briefly present two cases with a short review of the current literature.

Keywords: Celiac disease, Histopathology, Small bowel adenocarcinoma, Lymphoma.

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INTRODUCTION

Celiac disease (CD), an auto-immune disease triggered by dietary exposure to gluten in genetically susceptible population, is well-known condition associated with an overall increased risk for malignancies, particularly gastrointestinal lymphoma and adenocarcinoma (Spijkerman, M. *et al.*, 2016; Rahmoune, H. *et al.*, 2018; Han, Y. *et al.*, 2015; & Ludvigsson, J. F. 2012).

We report 2 peculiar cases of digestive neoplasms (Lymphoma and Adenocarcinoma) in adult celiac patients.

CASES DESCRIPTION

Case 1

A 34 year old male celiac patient presented to the emergencies for acute abdominal (epigastric) pain.

A thorough investigation was ordered: ultrasounds retrieved a small bowel mass while abdominal CT and the abdominal MRi confirmed the duodenum localization of the tumor.

Upper gastrointestinal endoscopy found an ulcerative, semi-obstructive mass of third duodenum, and subsequent biopsies and pathology highlighted an adenocarcinoma.

The patient could benefit a curative pancreaticoduodenectomy with good post-operative results.

Case 2

In a 2016 retrospective study of the reports (anonymous data) of intestinal biopsies in celiac patients at the University Hospital of Setif, fifty nine reports were collected, of which one case (a female patient, 41 years old) presented a CD with a jejunum lymphoma.

Further information about this case could not been obtained.

DISCUSSION

Meta-analysis, systematic reviews and population-based studies confirmed that patients with diagnosed CD are at increased risk of malignancy and

mortality (Spijkerman, M. *et al.*, 2016; Han, Y. *et al.*, 2015; & Zullo, A. *et al.*, 2017).

Specifically, patients with CD patients depict a higher risk of lymphoproliferative malignancy and gastrointestinal neoplasms. The particular enteropathy-associated T cell lymphoma (EATL) may occur in a subgroup of patients with refractory CD (Marchi, E., & O'Connor, O. A. 2020).

Regarding the first case, a 2015 meta-analysis found that CD was associated with increased risk of small bowel carcinoma: patients with CD have a greater risk of SBA with an estimated Odds Ratio = 14.41 (Han, Y. *et al.*, 2015).

SBA is a rare neoplasm, either sporadic or due to some predisposing conditions like particular genetic syndromes and immune-mediated intestinal disorders, including CD .

Aggressive and complete surgical resection to get clear margins is a potent cure of such conditions (Pisello, F. *et al.*, 2009).

The second case is of a lymphoproliferative neoplasm in a previously diagnosed celiac female. In such cases, persistent villous atrophy confers a high risk for lymphoproliferative neoplasms (Lebwohl, B. *et al.*, 2013).

Endoscopy is considered as an efficient diagnostic tool for the detection of malignant and premalignant lesions of the small bowel (Tomba, C. *et al.*, 2014; & Elli, L. *et al.*, 2017).

Gluten free diet might be helpful to diminish this risk of lymphoproliferation (Ludvigsson, J. F. 2012).

CONCLUSION

Malignancies are a potential risk in celiac adults, highlighting the importance of the gluten free diet and the need of a continuous follow-up. Early diagnosis and management of this high-risk population is highly recommended.

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