



REVISTA DE  
GASTROENTEROLOGÍA  
DE MÉXICO  
[www.elsevier.es/rgmx](http://www.elsevier.es/rgmx)



ORIGINAL ARTICLE

## Risk of colorectal adenomas in patients with celiac disease: a systematic review and meta-analysis<sup>☆</sup>



J. Lasa\*, A. Rausch, I. Zubiaurre

Departamento de Gastroenterología, Hospital Británico, Buenos Aires, Argentina

Received 16 March 2017; accepted 31 May 2017

Available online 22 March 2018

### KEYWORDS

Celiac disease;  
Colorectal adenoma;  
Colonoscopy

### Abstract

**Introduction and aims:** Whether celiac disease increases the risk of presenting with colorectal adenoma or not, has not been extensively evaluated. This question becomes relevant when considering early screening methods in patients with the disease. The aim of our article was to determine the risk of colorectal adenomas in celiac disease patients.

**Materials and methods:** A computer-assisted search of the MEDLINE-Pubmed, EMBASE, LILACS, Cochrane Library, and Google Scholar databases was carried out, encompassing the time frame of 1966 to December 2016. The search strategy consisted of the following MESH terms: 'celiac disease' OR 'celiac sprue' AND 'colorectal' OR 'colorectal neoplasia' OR 'colorectal adenoma'. A fixed-effect model was used for the analyses. The first analysis dealt with the prevalence of all presentations of colorectal adenoma in patients with celiac disease and the second was on the prevalence of advanced adenomas. The outcomes were described as odds ratios (OR) with their 95% confidence intervals.

**Results:** The search identified 480 bibliographic citations, 17 of which were chosen for evaluation. Fourteen of those studies were rejected, leaving a final total of three for the analysis. Those studies included 367 cases of celiac disease and 682 controls. No significant heterogeneity was observed ( $I^2 = 26\%$ ). There was no increased prevalence of colorectal adenomas in the celiac disease patients, when compared with the controls (OR: 0.94 [0.65-1.38]), and no significant difference was observed when assessing the prevalence of advanced adenomas (OR: 0.97 [0.48-1.97]).

**Conclusion:** Celiac disease was not associated with an increased risk of colorectal adenomas. However, due to the limited evidence available, more studies are necessary to determine whether there is an actual association.

© 2018 Asociación Mexicana de Gastroenterología. Published by Masson Doyma México S.A. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

\* Please cite this article as: Lasa J, Rausch A, Zubiaurre I. Riesgo de adenomas colorrectales en pacientes con enfermedad celiaca: una revisión sistemática y metaanálisis. Revista de Gastroenterología de México. 2018;83:91-97.

\* Corresponding author. Libertad 984, 1012 Buenos Aires, Argentina. Tel.: +541148111077.

E-mail address: [drjuanslaza@gmail.com](mailto:drjuanslaza@gmail.com) (J. Lasa).

**PALABRAS CLAVE**

Enfermedad celiaca;  
Adenoma colorrectal;  
Colonoscopia

**Riesgo de adenomas colorrectales en pacientes con enfermedad celiaca: una revisión sistemática y metaanálisis****Resumen**

**Introducción y objetivos:** No se ha evaluado de manera extensa si la enfermedad celiaca incrementa o no el riesgo de presentar adenoma colorrectal. Esta cuestión se hace relevante al considerar los métodos de cribado tempranos en pacientes con esta enfermedad. El objetivo de nuestro artículo fue determinar el riesgo de adenomas colorrectales en los pacientes con enfermedad celiaca.

**Materiales y métodos:** Se realizó una búsqueda electrónica en las bases de datos MEDLINE-Pubmed, EMBASE, LILACS, Cochrane Library y Google Scholar, integrando el periodo de tiempo de 1966 a diciembre de 2016. La estrategia de búsqueda consistió en los siguientes términos MESH: «enfermedad celiaca» O «esprue celiaco» Y «colorrectal» O «neoplasia colorrectal» O «adenoma colorrectal». Se empleó el uso de modelos de efectos fijos para los análisis. El primer análisis trató sobre la prevalencia de todas las presentaciones de adenoma colorrectal en pacientes con enfermedad celiaca y el segundo, sobre la prevalencia de adenomas avanzados. Los desenlaces se describieron como razones de momios (RM) con sus intervalos de confianza al 95%.

**Resultados:** La búsqueda identificó 480 citas bibliográficas, de las cuales 17 se escogieron para ser evaluadas. Catorce de aquellos estudios se rechazaron, dejando un total de 3 estudios para el análisis. Estos estudios incluían 367 casos de enfermedad celiaca y 682 controles. No se observó heterogeneidad significativa ( $I^2 = 26\%$ ). Al compararse con los controles, no se encontró un incremento en la prevalencia de adenomas colorrectales en los pacientes con enfermedad celiaca (RM: 0.94 [0.65-1.38]), y no se observaron diferencias significativas al valorar la prevalencia de adenomas avanzados (RM: 0.97 [0.48-1.97]).

**Conclusión:** La enfermedad celiaca no se asoció con el incremento de riesgo de adenomas colorrectales. Sin embargo, debido a la evidencia disponible limitada, se requiere de más estudios para determinar si existe una asociación real.

© 2018 Asociación Mexicana de Gastroenterología. Publicado por Masson Doyma México S.A. Este es un artículo Open Access bajo la licencia CC BY-NC-ND (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## Introduction and aims

Celiac disease is a relatively common autoimmune disorder, triggered by intestinal exposure to gluten –a glycoprotein in wheat, barley, rye, and oats.<sup>1</sup> Classically, it has been described as a condition causing nutrient malabsorption, with diarrhea or failure-to-thrive as common clinical features in pediatric patients. However, atypical presentations may be more common in adult patients, with clinical elements such as iron-deficiency anemia or osteoporosis as possible initial features of the disease.<sup>2</sup>

One of the most relevant issues regarding celiac disease is the risk of developing both malignant and non-malignant tumors.<sup>3</sup> Its association with an increased risk for small bowel adenocarcinoma, as well as for lymphoproliferative disorders, such as enteropathy-associated T-cell lymphoma, has been well described.<sup>4</sup> Other neoplastic conditions may not have as strong an association, as demonstrated in the recent meta-analysis by Han et al.,<sup>5</sup> but interestingly, it failed to show a significant association with colorectal

cancer. However, most of the studies evaluating a possible link between celiac disease and colorectal cancer are retrospective and do not always have a valid comparator. In addition, the definition of celiac disease, based on serologic findings only or on biopsy-based diagnoses, varies greatly.

Most colorectal cancers derive from benign asymptomatic neoplastic lesions, known as adenomas.<sup>6</sup> They can be detected and effectively treated through endoscopic or surgical polypectomy, before progressing to adenocarcinoma. There are many risk factors that increase the chances of developing colorectal adenomas and their progression to malignant tumors. In fact, knowing the true extent and influence of such risk factors is crucial in deciding on screening colonoscopy or any other preventive measure.<sup>7</sup>

Whether celiac disease increases the risk of developing colorectal adenoma has not been extensively evaluated. This question becomes relevant when considering early screening methods for celiac disease patients. Our aim was to determine the risk of colorectal adenoma in celiac patients according to the available evidence.

Download English Version:

<https://daneshyari.com/en/article/8731052>

Download Persian Version:

<https://daneshyari.com/article/8731052>

[Daneshyari.com](https://daneshyari.com)