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ORIGINAL ARTICLE

Organic colonic lesions in patients with irritable bowel syndrome: A comparative study[☆]



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Abstract

Introduction and aims: Any alarm symptoms in patients with irritable bowel syndrome (IBS) should be carefully evaluated. Colonoscopy is a standard diagnostic procedure for evaluating the colonic mucosa and ruling out probable diseases responsible for patient symptoms. We analyzed the colonoscopy findings in patients with and without IBS.

Material and methods: Ninety-six patients with IBS and 101 without IBS were consecutively enrolled in the study. All the patients in the IBS group met the Rome IV criteria, and underwent colonoscopy due to the appearance of red flags. The colonoscopy findings were compared between the 2 groups of patients.

Results: The main indications for colonoscopy in the IBS group were progressive abdominal pain (36.7%), rectal bleeding with fresh blood (17.7%), and occult blood in stool (12.5%). In the non-IBS group, the most prevalent indicators were rectal bleeding with fresh blood (37.6%), colorectal cancer surveillance (21.8%), and abdominal pain (13.9%). The most common macroscopic findings in the 2 groups were hemorrhoids, polyps, and anal fissure. There were no statistically significant differences with respect to the microscopic and macroscopic findings between groups.

Conclusions: We concluded that the prevalence of organic lesions in the colon of patients with IBS was the same as that in the patients without IBS. The Rome IV criteria accurately predicted IBS. Additional evaluation through colonoscopy in IBS should be based on the presence of alarm features.

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tion via colonoscopy in IBS should be based on the presence of alarm features.

In conclusion, to the best of our knowledge, this is the first study to evaluate organic lesions in the Iranian population. We compared colonic lesions in IBS and non-IBS patients that underwent colonoscopy examinations. We found that the prevalence of structural lesions of the colon in patients meeting the Rome IV criteria was not noticeably different from that in other patients. The present result emphasizes the acceptability of the predictive value of the Rome IV criteria for diagnosing IBS.

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Conflict of interest

The authors declare that there is no conflict of interest.

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References

1. Ford AC, Moayyedi P, Chey WD, et al. American College of Gastroenterology monograph on management of irritable bowel syndrome. *Am J Gastroenterol.* 2018;113:1-18, <http://dx.doi.org/10.1038/s41395-018-0084-x>.
2. Sperber AD, Dumitrascu D, Fukudo S, et al. The global prevalence of IBS in adults remains elusive due to the heterogeneity of studies: A Rome Foundation working team literature review. *Gut.* 2017;66:1075-82, <http://dx.doi.org/10.1136/gutjnl-2015-311240>.
3. Carmona-Sánchez R, Icaza-Chávez M, Bielsa-Fernández M, et al. The Mexican consensus on irritable bowel syndrome. *Rev Gastroenterol Mex.* 2016;81:149-67, <http://dx.doi.org/10.1016/j.rgm.2016.01.004>.
4. Jahangiri P, Jazi MSH, Keshteli AH, et al. Irritable bowel syndrome in Iran: SEPAHAN systematic review No 1. *Int J Prev Med.* 2012;3 Suppl 1. S1-L S9.
5. National Institute for Health and Care Excellence. Irritable bowel syndrome in adults: Diagnosis and management. Clinical guideline [CG61]. NICE; 2008 [actualizado 4 Abril 2017]. Disponible en: www.nice.org.uk/guidance/cg61.
6. Lacy BE, Pimentel M, Brenner DM, et al. ACG clinical guideline: Management of irritable bowel syndrome. *Am J Gastroenterol.* 2020;116:17-44, <http://dx.doi.org/10.14309/ajg.0000000000001036>.
7. Engsbro AL, Begtrup LM, Haastrup P, et al. A positive diagnostic strategy is safe and saves endoscopies in patients with irritable bowel syndrome: A five year follow up of a randomized controlled trial. *Neurogastroenterol Motil.* 2020;33:e14004, <http://dx.doi.org/10.1111/nmo.14004>.
8. Asghar Z, Thoufeeq M, Kurien M, et al. Diagnostic yield of colonoscopy in patients with symptoms compatible with Rome IV functional bowel disorders. *Clin Gastroenterol Hepatol.* 2022;20, <http://dx.doi.org/10.1016/j.cgh.2020.08.062>, 334- 341.e3.
9. Mearin F, Lacy BE, Chang L, et al. Bowel disorders. *Gastroenterology.* 2016;150, <http://dx.doi.org/10.1053/j.gastro.2016.02.031>, 1393-407.e5.
10. Black CJ, Yiannakou Y, Houghton LA, et al. Epidemiological, clinical, and psychological characteristics of individuals with self-reported irritable bowel syndrome based on the Rome IV vs Rome III criteria. *Clin Gastroenterol Hepatol.* 2020;18, <http://dx.doi.org/10.1016/j.cgh.2019.05.037>, 392- 398.e2.
11. Brandt LJ, Chey WD, Foxx-Orenstein AE, et al. An evidence-based position statement on the management of irritable bowel syndrome. *Am J Gastroenterol.* 2009;104:S1-35, <http://dx.doi.org/10.1038/ajg.2008.122>.
12. Chey WD, Kurlander J, Eswaran S. Irritable bowel syndrome: A clinical review. *JAMA.* 2015;313:949-58, <http://dx.doi.org/10.1001/jama.2015.0954>.
13. Häuser W, Marschall U, Leyer P, et al. The prevalence, comorbidity, management and costs of irritable bowel syndrome. *Dtsch Arztebl Int.* 2019;116:463-70, <http://dx.doi.org/10.3238/arztebl.2019.0463>.
14. Sood R, Camilleri M, Gracie DJ, et al. Enhancing diagnostic performance of symptom-based criteria for irritable bowel syndrome by additional history and limited diagnostic evaluation. *Am J Gastroenterol.* 2016;111:1446-54, <http://dx.doi.org/10.1038/ajg.2016.308>.
15. Lieberman DA, Williams JL, Holub JL, et al. Colonoscopy utilization and outcomes 2000 to 2011. *Gastrointest Endosc.* 2014;80, <http://dx.doi.org/10.1016/j.gie.2014.01.014>, 133- 143.e3.
16. El-Salhy M, Halwe J, Lomholt-Beck B, et al. The prevalence of inflammatory bowel diseases, microscopic colitis, and colorectal cancer in patients with irritable bowel syndrome. *Gastroenterol Insights.* 2011;3:e3, <http://dx.doi.org/10.4081/gi.2011.e3>.
17. Halpin SJ, Ford AC. Prevalence of symptoms meeting criteria for irritable bowel syndrome in inflammatory bowel disease: Systematic review and meta-analysis. *Am J Gastroenterol.* 2012;107:1474-82, <http://dx.doi.org/10.1038/ajg.2012.260>.
18. Yang Z, Clark N, Park K. Effectiveness and cost-effectiveness of measuring fecal calprotectin in diagnosis of inflammatory bowel disease in adults and children. *Clin Gastroenterol Hepatol.* 2014;12, <http://dx.doi.org/10.1016/j.cgh.2013.06.028>, 253.e2- 262.e2.
19. Menees SB, Powell C, Kurlander J, et al. A meta-analysis of the utility of C-reactive protein, erythrocyte sedimentation rate, fecal calprotectin, and fecal lactoferrin to exclude inflammatory bowel disease in adults with IBS. *Am J Gastroenterol.* 2015;110:444-54, <http://dx.doi.org/10.1038/ajg.2015.6>.
20. Hsiao CW, Huang WY, Ke TW, et al. Association between irritable bowel syndrome and colorectal cancer: A nationwide population-based study. *Eur J Intern Med.* 2014;25:82-6, <http://dx.doi.org/10.1016/j.ejim.2013.11.005>.
21. Nørgaard M, Farkas D, Pedersen L, et al. Irritable bowel syndrome and risk of colorectal cancer: A Danish nationwide cohort study. *Br J Cancer.* 2011;104:1202, <http://dx.doi.org/10.1038/bjc.2011.65>.
22. Rodríguez LG, Ruigómez A, Wallander M-A, et al. Detection of colorectal tumor and inflammatory bowel disease during follow-up of patients with initial diagnosis of irritable bowel syndrome. *Scand J Gastroenterol.* 2000;35:306-11, <http://dx.doi.org/10.1080/003655200750024191>.
23. Ozer SP, Barut SG, Ozer B, et al. The relationship between tumor budding and survival in colorectal carcinomas. *Rev Assoc Med Bras (1992).* 2019;65:1442-7, <http://dx.doi.org/10.1590/1806-9282.65.12.1442>.
24. Jung G, Hernández-Illán E, Moreira L, et al. Epigenetics of colorectal cancer: Biomarker and therapeutic