**Name of Journal:** *World Journal of Gastroenterology*

**Manuscript NO:** 68003

**Manuscript Type:** LETTER TO THE EDITOR

**Comment on “Diagnostic approach to faecal incontinence: What test and when to perform?”**

Wang JT *et al*. Comment on diagnostic approach to FI

Jiang-Tao Wang, Yan-Dong Miao, Quan-Lin Guan

**Jiang-Tao Wang, Yan-Dong Miao,** TheFirst Clinical Medical College of Lanzhou University, Lanzhou University, Lanzhou 730000, Gansu Province, China

**Quan-Lin Guan,** Department of Oncology, The First Hospital of Lanzhou University, Lanzhou University, Lanzhou 730000, Gansu Province, China

**Author contributions:** Wang JT and Miao YD designed and performed the research; Wang JT wrote this comment; Guan QL revised the manuscript.

**Corresponding author: Quan-Lin Guan, MD, PhD, Chief Doctor, Full Professor,** Department of Oncology, The First Hospital of Lanzhou University, Lanzhou University, No. 1 Donggang West Road, Chengguan District, Lanzhou 730000, Gansu Province, China. guanquanlin@yeah.net

**Received:** May 9, 2021

**Revised:** June 21, 2021

**Accepted:** August 20, 2021

**Published online:**

**Abstract**

We recently read with interest the article "Diagnostic approach to faecal incontinence: What test and when to perform?". This is a comprehensive and practical review, which has particular significance for guiding clinicians to improve the examination strategy. Although we appreciate their work very much, based on the in-depth analysis of this research, we found some detailed problems in the article and will give our comments in this letter. If the author can further improve the relevant research, it will be valuable.

**Key Words:** Faecal; Incontinence; Manometry; Diagnostic; Pathophysiology; Tools

Wang JT, Miao YD, Guan QL. Comment on “Diagnostic approach to faecal incontinence: What test and when to perform?”. *World J Gastroenterol* 2021; In press

**Core Tip:** Faecal incontinence (FI) has caused social, psychological, and economic pressure on an increasing number of people. It is essential to explore the diagnostic strategies and treatment techniques for FI. We read with great interest the article "Diagnostic approach to faecal incontinence: What test and when to perform?". This article had substantial clinical reference value and minor problems. We want to share our views and opinions on this valuable work.

**TO THE EDITOR**

We read with pleasure the article "Diagnostic approach to faecal incontinence: What test and when to perform?"[1]. Within this article, the authors analyzed and summarized systematically the assessment and examination of patients with faecal incontinence (FI), thereby providing a valuable reference for clinicians. The salient highlight of this review was that it not only systematically expounded the etiology and pathogenesis of FI but also combined clinical evaluation and inspection strategies and provided unique insights into the structured and step-by-step method of evaluating and diagnosing FI. This research has a strong reference and practical value for sorting out the management strategies for FI and overcoming limitations. We found some details through further research and analysis and anticipate a discussion with the authors.

First, the authors analyzed the etiology and clinicopathologic features of patients with FI and described the diagnostic strategies including high-resolution anorectal manometry, perineal ultrasound, transrectal ultrasound, endopelvic magnetic resonance imaging, and electromyography of the anal sphincter. The use of a standardized quality-of-life assessment tool to define the extent and impact of FI is the first step in assessing patients with FI[2,3]. For instance, the PERFECT system in the modified OXFORD scale is available for evaluating vaginal and rectal resections. However, the most critical step was not detailed in this review.

From this paper, the authors concluded that the incidence of FI had no differences in both males and females, but the pathogenesis is different. To this end, we have reviewed a great deal of relevant literature and obtained different conclusions. For example, a study from the United States reported that the prevalence of FI is 2.2%, with 63% in females and 37% in males, and approximately 30% of patients are over 65 years of age[4]. Consequently, we conclude that females are more likely to develop FI owing to their physiology and childbearing experiences[5]. In addition, the factors that cause FI are different in women and men, with women being more susceptible to anal sphincter disorders due to obstetric trauma and reduced pelvic floor muscle training (PFMT), whereas men are more likely to suffer from anorectal sensory disturbances[6]. Based on a careful analysis of the authors' list of etiologies and risk factors for FI, we found that some factors overlooked are becoming increasingly important with the increasing incidence of rectal tumors and gynecology in women. For example, undergoing rectal surgery, pelvic radiotherapy, or the presence of the tumor or inflammatory stricture (IBM) is usually accompanied by impaired rectal storage function and decreased compliance[3]. Therefore, we consider that the abovementioned factors should be supplemented.

Finally, the authors provided a review of common tools and strategies for diagnosing FI, which in turn provides guidance and reference for clinical application. Unfortunately, after extensive reading of the associated papers, we found that such strategies were insufficiently comprehensive. For example, an increasing number of studies recommend the usage of NS neurostimulation electrodes for diagnosis and treatment as a preliminary step in the absence of contraindications[7,8]. In 2012, Cochrane et al. conducted a meta-analysis of 21 studies and found that there is a lack of sufficient trials to support the effectiveness of pure anal sphincter exercise and biologic therapy. Consequently, a combination of biofeedback and PFMT with other methods is recommended (*e.g.*, neuroelectrical stimulation combined with techniques) may improve the overall outcome[9].

In summary, this review can be a valuable basis and reference for the diagnosis of patients with FI and is of particular practical value for guiding clinicians in the development of screening strategies. Of course, we only offer our comments based on the existing literature or data on the shortcomings of this review, and more comprehensive and clinically verified examination strategies and treatments are expected to be served for patients with FI.

**REFERENCES**

1 **Sbeit W**, Khoury T, Mari A. Diagnostic approach to faecal incontinence: What test and when to perform? *World J Gastroenterol* 2021; **27**: 1553-1562 [PMID: 33958842 DOI: 10.3748/wjg.v27.i15.1553]

2 **Vaizey CJ**, Carapeti E, Cahill JA, Kamm MA. Prospective comparison of faecal incontinence grading systems. *Gut* 1999; **44**: 77-80 [PMID: 9862829 DOI: 10.1136/gut.44.1.77]

3 **Saldana Ruiz N**, Kaiser AM. Fecal incontinence - Challenges and solutions. *World J Gastroenterol* 2017; **23**: 11-24 [PMID: 28104977 DOI: 10.3748/wjg.v23.i1.11]

4 **Nelson R**, Norton N, Cautley E, Furner S. Community-based prevalence of anal incontinence. *JAMA* 1995; **274**: 559-561 [PMID: 7629985]

5 **Kumar N**, Kumar D. Fecal incontinence and rectal prolapse. *Indian J Gastroenterol* 2019; **38**: 465-469 [PMID: 32002830 DOI: 10.1007/s12664-020-01014-1]

6 **Mazur-Bialy AI**, Kołomańska-Bogucka D, Opławski M, Tim S. Physiotherapy for Prevention and Treatment of Fecal Incontinence in Women-Systematic Review of Methods. *J Clin Med* 2020; **9** [PMID: 33053702 DOI: 10.3390/jcm9103255]

7 **Kenefick NJ**, Vaizey CJ, Nicholls RJ, Cohen R, Kamm MA. Sacral nerve stimulation for faecal incontinence due to systemic sclerosis. *Gut* 2002; **51**: 881-883 [PMID: 12427794 DOI: 10.1136/gut.51.6.881]

8 **Maeda Y**, O'Connell PR, Lehur PA, Matzel KE, Laurberg S; European SNS Bowel Study Group. Sacral nerve stimulation for faecal incontinence and constipation: a European consensus statement. *Colorectal Dis* 2015; **17**: O74-O87 [PMID: 25603960 DOI: 10.1111/codi.12905]

9 **Norton C**, Chelvanayagam S, Wilson-Barnett J, Redfern S, Kamm MA. Randomized controlled trial of biofeedback for fecal incontinence. *Gastroenterology* 2003; **125**: 1320-1329 [PMID: 14598248 DOI: 10.1016/j.gastro.2003.09.039]

**Footnotes**

**Conflict-of-interest statement:** All authors declare having no conflict of interests.

**Open-Access:** This article is an open-access article that was selected by an in-house editor and fully peer-reviewed by external reviewers. It is distributed in accordance with the Creative Commons Attribution NonCommercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: http://creativecommons.org/Licenses/by-nc/4.0/

**Manuscript source:** Invited manuscript

**Peer-review started:** May 9, 2021

**First decision:** June 12, 2021

**Article in press:**

**Specialty type:** Gastroenterology and hepatology

**Country/Territory of origin:** China

**Peer-review report’s scientific quality classification**

Grade A (Excellent): 0

Grade B (Very good): 0

Grade C (Good): C, C

Grade D (Fair): 0

Grade E (Poor): 0

**P-Reviewer:** Acharyya BC, Tadros M **S-Editor:** Fan JR **L-Editor: P-Editor:**