

REVIEW

Digestive health in older adults: a comprehensive approach

Salud digestiva en adultos mayores: un enfoque integral

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ABSTRACT

The impact of population ageing on the digestive health of older adults, focusing on gastrointestinal disorders as a frequent and complex problem. Physiological changes associated with ageing were described, such as alterations in the gut microbiota and epithelial barrier dysfunction, which increased the incidence of conditions such as chronic constipation and irritable bowel syndrome. Therapeutic interventions such as the use of probiotics, prebiotics, and dietary fibre were also reviewed, showing promising results in symptom relief, although with methodological limitations in the available studies. In addition, the negative influence of polypharmacy on gastrointestinal health was highlighted. Finally, it was concluded that a comprehensive, evidence-based approach was key to improving digestive quality of life in old age.

Keywords: Ageing; Microbiota; Probiotics; Quality of Life; Older Adults.

RESUMEN

El impacto del envejecimiento poblacional en la salud digestiva de los adultos mayores, enfocándose en los trastornos gastrointestinales como una problemática frecuente y compleja. Se describieron los cambios fisiológicos asociados a la vejez, tales como alteraciones en la microbiota intestinal y la disfunción de la barrera epitelial, que aumentaron la incidencia de afecciones como el estreñimiento crónico y el síndrome del intestino irritable. También se revisaron intervenciones terapéuticas como el uso de probióticos, prebióticos y fibra dietética, que mostraron resultados prometedores en el alivio de síntomas, aunque con limitaciones metodológicas en los estudios disponibles. Además, se destacó la influencia negativa de la polifarmacia sobre la salud gastrointestinal. Finalmente, se concluyó que un enfoque integral y basado en la evidencia fue clave para mejorar la calidad de vida digestiva en la vejez.

Palabras clave: Envejecimiento; Microbiota; Probióticos; Calidad De Vida; Adultos Mayores.

INTRODUCTION

Population aging has become one of the most significant demographic transformations of the 21st century, with profound implications for public health. As the proportion of older people in society increases, new clinical challenges arise linked to the physiological characteristics of this stage of life. Among these, gastrointestinal disorders represent a frequent and complex problem, given their high prevalence and impact on the quality of life of older adults. This phenomenon, associated with changes in the gut microbiota, multiple medications, and dietary alterations, requires a comprehensive therapeutic approach that considers both pharmacological interventions and nutritional strategies and the use of probiotics. This analysis examines these key aspects and explores the most promising current therapeutic options for improving digestive health in old age.

DEVELOPMENT

Population aging is a phenomenon of growing interest in global public health. According to the World Health Organization,⁽¹⁾ between 2015 and 2050, the proportion of people over 60 will double, rising from 12 % to 22 % of the global population. This demographic shift brings new clinical challenges, especially regarding gastrointestinal disorders affecting this vulnerable population.

Multiple physiological changes occur in old age that alter digestive function. Anand et al.⁽²⁾ highlight that aging leads to changes in the composition of the gut microbiota and a decrease in intestinal epithelial regeneration, which promotes low-grade chronic inflammation and intestinal barrier dysfunction. These alterations are closely related to a higher prevalence of digestive diseases such as chronic constipation, irritable bowel syndrome (IBS), functional dyspepsia, and gastroesophageal reflux disease (GERD).^(2,3)

Chronic constipation and irritable bowel syndrome (IBS) are two of the most common functional disorders in older adults. According to Ford et al.⁽³⁾, the prevalence of these disorders can reach up to 20 %, depending on the diagnostic criteria used. Both are exacerbated by polypharmacy, immobility, and changes in diet and lifestyle.⁽⁴⁾

Modulating the gut microbiota is a relevant therapeutic strategy in this context. Several studies have documented that probiotics can improve gastrointestinal symptoms such as constipation, abdominal pain, and bloating in older patients.^(5,6) These interventions act through mechanisms such as competition with pathogenic bacteria, producing antimicrobial substances, and improving the local immune response.^(7,8)

Wen et al.⁽⁶⁾, in a systematic review, found that the use of probiotics such as *Lactobacillus rhamnosus* GG and *Bifidobacterium lactis* in patients with IBS-C (irritable bowel syndrome with constipation) is associated with a significant improvement in bowel movement frequency and a reduction in abdominal pain. These findings are consistent with those reported by Min et al.⁽⁹⁾, who observed beneficial effects when using yogurt enriched with *Bifidobacterium lactis* and acacia fiber.

On the other hand, dietary intervention, especially increasing soluble fiber intake, has also shown positive effects on the gut health of older adults. Ford et al.⁽¹⁰⁾ argue that dietary fiber, such as psyllium, can relieve symptoms of chronic idiopathic constipation and reduce abdominal bloating, with a lower risk of adverse effects than other pharmacological treatments.

In addition, the dietary approach can be complemented with prebiotics, such as galactooligosaccharides, which promote the growth of beneficial bacteria. Silk et al.⁽¹¹⁾ demonstrated that a diet containing trans-galactooligosaccharides improved the microbiota composition and gastrointestinal symptoms in patients with IBS.

It is important to consider that in the geriatric population, the simultaneous use of multiple medications—a condition known as polypharmacy—can negatively influence gastrointestinal health. Sánchez-Rodríguez et al.⁽⁴⁾ emphasize that polypharmacy increases the risk of drug interactions and adverse digestive effects, making non-pharmacological strategies, such as dietary and probiotic interventions, even more important.

Despite the potential benefits, several authors warn about the heterogeneity of clinical study results. Spiegel⁽¹²⁾ and Chang⁽¹³⁾ highlight the need to better understand the pathophysiological mechanisms of the gut-brain axis and standardize the strains, doses, and duration of probiotic treatment. Methodological variability represents an important limitation for the generalization of results, as Wen et al.⁽⁶⁾ also pointed out in their critical analysis.

Managing gastrointestinal disorders in older adults requires a multidimensional understanding that considers age-related physiological changes, the impact of the gut microbiota, the influence of medications, and the effectiveness of therapeutic interventions such as probiotics and dietary changes.^(13,14,15) While current studies offer encouraging results, further research is needed to establish robust and specific clinical guidelines for this population.

CONCLUSIONS

Managing gastrointestinal disorders in older adults requires a holistic approach, considering the multiple factors involved in their etiology and evolution. The physiological changes associated with aging, the influence of the gut microbiota, and polypharmacy make it necessary to resort to interventions beyond conventional treatments. The use of probiotics, the incorporation of dietary fiber, and the use of prebiotics are emerging as safe and potentially effective strategies for alleviating gastrointestinal symptoms in this population. However, the variability in clinical outcomes and the lack of standardization in interventions highlight the urgency of continuing research to generate robust evidence to support clear clinical recommendations. Addressing this issue with an interdisciplinary and evidence-based approach is essential to promote healthier and more dignified aging.

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CONFLICT OF INTEREST

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