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Managing Inflammatory Bowel Diseases in the Elderly Population (Those After the Age of 60)

The incidence of Inflammatory Bowel Diseases (IBD) is increasing worldwide and as our population ages, we will be caring for a growing number of IBD patients who are transitioning into advanced age. Although the peak incidence of IBD is between ages 20-39 years, a second peak is recognized between ages 50-70. (Molodecky, Soon, Rabi, et al. 2012; Katz, Pardi, 2011)

The debilitating effects of IBD compounded with age-related decrements in health and functional capacity, make medical management of older patients distinctly challenging to clinicians.

<u>TIP #1</u>: Compare the important clinically different presentations in the elderly to the younger patient. (Nimmons, Limdi, 2016. Gisbert, Chaparro, 2014)

Crohn's Disease

- Diagnosis is delayed in older individuals with a mean time delay of 6 years compared to 2 years in younger individuals
- More colonic involvement and inflammatory disease with lower frequency of fistulas and strictures
- Presents with less bleeding and abdominal pain
- First episode is more severe compared to the younger individual
- Change in disease behavior is less progressive in the elderly

Ulcerative Colitis

- Left-sided or extensive disease more common than isolated proctitis
- Presents with less diarrhea, abdominal pain, and weight loss
- Disease behavior more likely to remain stable

<u>Both</u>

- Extraintestinal manifestations are less
- Less likely to have family history of IBD
- Higher risk of non-Hodgkin's lymphoma with thiopurines
- Higher risk of non-melanomatous skin cancer with anti-TNF therapy

TIP #2: Recognize barriers for the delay in diagnosis in the elderly. (Harper, McAuliffe,Beeken, 1986)

- Disinclination to seek medical advice
- Lack of access to specialist healthcare
- An initial misdiagnosis compared to younger patients
- Higher prevalence of conditions mimicking and confused with IBD in the elderly. This prevalence may affect the true incidence of IBD assessed.
 - o Complicated diverticular disease (diverticulitis and diverticular bleeding)
 - o Radiation colitis
 - Non-steroidal anti-inflammatory intestinal injury

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- o Ischemic colitis
- Infective colitis

<u>TIP #3</u>: Identify complex management challenges in the elderly. (Roman, Munoz, 2011. Charpentier, Salleron, Savoye, et al. 2014.)

- Clinical co-morbidities
- Polypharmacy
- Social issues
- Mismatch between chronological and biological age (functional status)
- Currently no consensus guidelines to manage the elderly

- Patients' over the age of 65 frequently excluded from clinical studies may limit evidence-based decision making

<u>TIP #4:</u> Recognize that elderly patients are hospitalized more than younger patients, with worse outcomes. (Ananthakrishnan, Binion, 2009. Bassi, Dodd, et al. 2004. Odes, Vardi, et al. 2006. Loftus, 2002)

- More ill
- More malnourished
- Anemic/higher transfusion requirements
- Hypovolemic
- Longer post-op hospital stay especially after surgery

<u>TIP #5:</u> Identify crucial considerations in the therapy of IBD in the elderly. (van Duin, Mohanty, et al. 2007. Drey, Kaiser, 2011. Gavazzi, Krause 2002. Stallmach, Hagel, et al. 2011. Cross, Wilson et al. 2005. MacLaughlin, Raehi, et al. 2005)

- Immune function declines with age
 - Malnutrition also accentuates decline in immune function
- Treatment with immunosuppressive medications increases risk of opportunistic infection and possibly even malignancy
- Polypharmacy is common and may impact adherence and thus, clinical outcomes
- Age-related conditions
- Home circumstances
- Impaired mobility
- Impaired memory
- Consequent need for practical support

References

Ananthakrishnan AN, Binion DG. Treatment of ulcerative colitis in the elderly. Dig Dis. 2009; 27; 327-334.

Ananthakrishnan AN, Donaldson T, et al. Management of Inflammatory Bowel Disease in the Elderly Patient: Challenges and Opportunities. Inflamm Bowel Dis. June 2017; 23 (6): 882-892.

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Balkrishnan R. Predictors of medication adherence in the elderly. Clin Ther. 1998; 20: 764-71.

Bassi A, Dodd S, Williamson P, et al. Cost of illness of inflammatory bowel disease in the UK: a single centre retrospective study. Gut. 2004; 53: 1471-1478.

Cairns SR, Scholefield JH et al. Guidelines for colorectal cancer screening and surveillance in moderate high risk groups (update from 2002). Gut. 2010; 59: 666-689.

Castle SC. Clinical relevance of age-related immune dysfunction. Clin Infect Dis. 2000; 31: 578-85. Castle SC. Impact of age-related immune dysfunction on risk of infections. Z Gerontol Geriatr. 2000; 33: 341-9.

Charpentier C, Salleron J, Savoye G, et al. Natural history of elderly-onset inflammatory bowel disease: a population based cohort study. Gut. 2014; 63: 423-432.

Cheddani H, Dauchet I, et al. Cancer in elderly-onset inflammatory bowel disease: A population-based study. J Crohn's Colitis. 2014; 8 Suppl 1:S60.

Cross RK, Wilson KT, Binion. Poly pharmacy and Crohn's disease. Aliment Pharmacol Ther. 2005; 21: 1211-1216.

Drey M, Kaiser MJ. Male nutrition in elderly. Dtsch Med Wochenschr. 2011; 136: 176-178.

Eaden JA, Abrams KR, Mayberry JF. The risk of colorectal cancer in ulcerative colitis: a meta-analysis. Gut. 2001; 48: 526-535.

Farraye FA, Odze RD, etal. A GA medical positions statement on the diagnosis and management of colorectal neoplasia in inflammatory bowel disease. Gastroenterology. 2010: 138: 738-745.

Gavazzi G, Krause KH. Aging and infection. Lancet Infect Dis. 2002; 2: 659-666

Gisbert JP, Chaparro M. Systemic review with meta-analysis: inflammatory bowel disease in the elderly.

Aliment Pharmacol Ther. 2014; 39:459-477.

Guagnozzi, D, Lucendo, A. Colorectal cancer surveillance in patients with inflammatory bowel disease: What is new? World J Gastrointestinal Endoscopy. 2012; 4(4): 108-116.

Harper PC, McAuliffe TL, Beeken WI. Crohn's disease in the elderly. A statistical comparison with younger patient's matched for sex and duration of disease. Arch Intern Med 1986, 146. 753-755.

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Juneja M. Geriatric inflammatory bowel disease: phenotypic presentation, treatment patterns, nutritional status, outcomes, and comorbidity. Dig Dis Sci. 2012 Sep; 57(9): 2408-15.

Katz S, Pardi DS. Inflammatory bowel disease of the elderly: frequently asked questions (FAQs). Am J Gastroenterol. 2011; 106:1889-1897.

Kim ER, Chang DK. Colorectal cancer in inflammatory bowel disease: the risk, pathogenesis, prevention and diagnosis. World J Gastroenterol. 2014; 20(29):9872–9881.

Kornbluth A, Sachar DB. Ulcerative colitis practice guidelines in adults: American College of Gastroenterology, Practice Perimeters Committee. Am J Gastroenterol. 2010; 105: 501-523. Loftus EV. A matter of life and death: mortality in Crohn's disease. Inflamm Bowel Disease. 2002; 8: 428-429.

MacLaughlin EJ, Raehl, et al. Assessing medication adherence in the elderly: which tools to use in clinical practice? Drugs Aging. 2005; 22: 231-255.

Melmed GY, Agarwal N, French RW, et al. Immunosuppression impairs response to pneumococcal polysaccharide vaccination in patients with inflammatory bowel disease. Am J Gastroenterol. 2010; 105: 148-54.

Molodecky NA, Soon IS, Rabi DM, et al. Increasing incidence and prevalence of the inflammatory bowel diseases with time, based on systemic review. Gastroenterology. 2012; 142:46-54.

Nimmons D, Limdi; JK. Elderly patients and inflammatory bowel disease. World J of Gastrointestinal Pharmacol and Ther. 2016: February 6; 7(1): 51-65.

Odes S, Vardi H, Friger M, et al. Cost analysis and cost determinants in a European inflammatory bowel disease inception cohort with 10 years follow-up evaluation. Gastroenterology. 2006; 131: 719-728.

Roman AL, Munoz F. Comorbidity in inflammatory bowel disease. World J Gastroenterol. 2011; 17:2723-2733.

Rutter MD, Saunders BP, et al. Thirty urinalysis of a colonoscopic surveillance program for neoplasia in ulcerative colitis. Gastroenterology. 2006; 130: 1030-1038.

Stallmach A, Hagel S, et al. Medical and surgical therapy of inflammatory bowel disease in the elderly - prospects and complications. J Crohns Colitis. 2011; 5: 177-188.

Stein RB, Hanauer SB. Comparative tolerability of treatments for inflammatory bowel disease. Drug Saf. 2000; 23: 429-48.

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Tremaine WJ, Timmons LJ, et al. Age at onset of inflammatory bowel disease and the risk of surgery for nonneoplastic bowel disease. Aliment Pharmacol Ther. 2007; 25: 1435-41.

Van Duin D, Mohanty S, et al. Age associated defect in human TLR-1/2 function. J Immunol. 2007; 178: 970-975.

Van Eijken M, Tsang S, Wensig M et al. interventions to improve patient compliance in older patients living in the community: a systemic review of the literature. Drugs Aging. 2003; 20: 229-40. Viget N, Vernier-Massouille G, et al. Opportunistic infections in patients with inflammatory bowel disease: prevention and diagnosis. Gut. 2008; 105:57:549- 58.

Werner H, Kuntsche J. Infections in the elderly – what is different? Z Gerontol Geriatr. 2000; 33: 350-6.

Acknowledgement: Developed by Laryl Riley, NP and reviewed by the Crohn's & Colitis Foundation's Nurse & Advanced Practice Committee. September 2020

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