Ultrasonographic characteristics of elderly Crohn's disease patients

Ultrasonografske karakteristike starijih bolesnika s Crohnovom bolesti

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Introduction and aim: The prevalence of IBD patients over 60 years of age worldwide is increasing, reaching up to 30% of all patients. Intestinal ultrasound (IUS) has been proven a safe, cheap, non-invasive and accurate

Table 1. General and ultrasonographic characteristics of elderly and non-elderly CD patients

		Elderly	Non-elderly
Number of patients, n		10	124
Females, %		80	54
Mean age, years		67.3	39.38
Montreal disease location, %: - L1 - L2 - L3 - L4 (alone or with L1-3)		80 0 20 10	49.4 4 46 12.4
Initial IUS characteristics	Mean bowel wall thickness (BWT), mm	6.1	4.5
	Bowel wall stratification (BWS), %: - no - unsure - focal (<4cm) - extensive	30 20 40 10	54.8 4.8 31.5 8.9
	Color doppler signal (CDS), %: - normal - short signal - long inside bowel signal - long inside and outside signal	20 30 40 10	25.8 35.5 35.5 3.2
	Limberg score, %: - normal - grade 1 - grade 2 - grade 3 - grade 4	20 10 20 40 10	23.4 10.5 29 31.2 4.8
	Prestenotic dilatation, %	0	12.1
	Fibrosis, %	0	4
	Stenosis, %	60	36.3
	Fat tissue inflammation %: - no - unsure - present	50 10 40	58.1 4 37.9
	Abdominal lymphadenopathy, %	60	26.6
	Free intraperitoneal fluid, %	20	25
	Abscess, %	0	4
	Fistulae, %	0	5.6
	Perivisceral fat tissue affected, %	30	37.1
	Mean IBUS-SAS score	52.4	41.49

alternative to standard methods for diagnosing and monitoring of Crohn's disease (CD) such as colonoscopy, CT colography or MR enterography.

Methods: A retrospective, non-interventional, data review study was conducted among consecutive adult CD patients who underwent IUS in Sestre milosrdnice University Hospital Center, Zagreb, Croatia in the period from April 2019 to November 2022. Data of interest were basic patient and disease characteristics and IUS findings such as bowel wall thickness (BWT), bowel wall stratification (BWS), color doppler signal (CDS), fat tissue inflammation and other. Elderly (patients of 65 years of age or older) and non-elderly patient IUS and disease characteristics were compared using descriptive statistics, continuous variables were compared using Mann-Whitney test and categorical variables using Fisher test. P-value <0.05 was considered to be statistically significant in all tests.

Results: A total of 134 patients were included in the study, of which 10 were 65 years of age and older. Both groups of patients were predominately female with ileum being the most common disease location. Mean disease duration priror to IUS in the elderly was 123.8 months. When comparing ultrasonographic data of interest, both groups had numerically similar rates of all measured variables. There was no statistically significant difference observed in mean BWT, stenosis rate, lymphadenopathy rate and mean IBUS-SAS score. All measured variables are presented in Table 1.

Conclusion: These preliminary results revealed no significant differences in ultrasonographic disease characteristics between elderly and non-elderly CD patients. IUS can be used in elderly CD patients as a reliable non-invasive procedure. Confirmation of these results in a larger sample is warranted.

LITERATURE

1. *Molodecky NA, Soon IS, Rabi DM, Ghali WA, Ferris M, Chernoff G, et al.* Increasing incidence and prevalence of the inflammatory bowel diseases with time, based on systematic review. Gastroen- terology. 2012;142:46–54.