

Title:

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DOI: 10.17235/reed.2018.5666/2018 Link: <u>PubMed (Epub ahead of print)</u>

Please cite this article as:

Luján Sanchís Marisol, Juanmartiñena José Francisco, Fernández-Urien Ignacio. Factors that predict the presence of non-small bowel lesions during capsule endoscopy examinations. Rev Esp Enferm Dig 2018. doi: 10.17235/reed.2018.5666/2018.



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Revista Española de Enfermedades Digestivas

CE 5666 inglés

Factors that predict the presence of non-small bowel lesions during capsule endoscopy

examinations

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Key words: Capsule endoscopy. Small bowel. Stomach. Colon. Obscure gastrointestinal

bleeding.

Dear Editor,

We read with great interest the papers by Juanmartiñena et al. entitled "Colonic lesions

in patients undergoing small bowel capsule endoscopy: incidence, diagnostic and

therapeutic impact" (1) and "Gastroduodenal lesions detected during small bowel capsule

endoscopy: incidence, diagnostic and therapeutic impact" (2). Since its introduction into

clinical practice in 2000, capsule endoscopy (CE) has become a first-line procedure for the

investigation of small bowel (SB) diseases. In fact, more than two million capsule

examinations have been performed worldwide to date (3). SBCE begins to capture

images from the mouth and continues until the end of the battery life, which usually

occurs after reaching the colon. Therefore, it may also allow the detection of lesions in

other segments of the gastrointestinal tract and theoretically accessible to conventional

endoscopy (4). Juanmartiñena et al. demonstrate that the incidence of gastroduodenal

(2) and colonic lesions (1) detected during SBCE is 31% and 9%, respectively. In

collaboration with the mentioned authors and following their line of research, we



investigated factors that could predict the presence of non-small bowel lesions during SBCE. A statistically significant relationship was found via univariate analysis between non-small bowel lesions and the following variables: male, age > 60 years, NSAIDs, procedure indication, previous endoscopic examinations with findings, procedure timing (< 72 h) and reader experience. However, according to the multivariate analysis (Table 1), only the following variables were associated with an increased risk of presenting non-small bowel lesions: male gender (OR = 0.74), age > 60 years (OR = 1.01), non-experienced reader (OR = 1.56) and both previous gastroscopy (OR = 1.80) and ileocolonoscopy (OR = 1) with findings. However, these results do not allow us to develop a reliable formula to predict the presence of non-small bowel lesions. Thus, according to that previously reported by Juanmartiñena et al. (1,2), the review of all SBCE images is still high recommended, even those located within the reach of conventional endoscopy.

References

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Table 1. Multivariate analysis

Variables	OR (CI 95%)	p-value
Gender (male)	1.36 (1.07, 1.72)	0.012
Age > 60 years	1.01 (1.01, 1.02)	< 0.001
Experience*	1.56 (1.28, 2.06)	0.002
Normal gastroscopy	0.99 (0.68, 1.43)	< 0.001
Abnormal gastroscopy	1.80 (1.25, 2.59)	
Normal colonoscopy	0.50 (0.34, 0.74)	< 0.001
Abnormal colonoscopy	1.00 (0.71, 1.43)	

^{*}Experienced reader was defined as a reader who has read more than 200 videos and performs capsule endoscopy readings 2-3 days per week.