

Increased diagnostic yield of small bowel tumors with PillCam: the role of capsule endoscopy in the diagnosis and treatment of gastrointestinal stromal tumors (GISTs). Italian single-center experience

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ABSTRACT

Background. Gastrointestinal stromal tumors (GISTs) are rare tumors, accounting for 1-3% of all gastrointestinal malignancies; they are, however, the most common gastric and small bowel mesenchymal tumors. The length and relative inaccessibility of the small bowel have long constrained the diagnosis of GISTs mainly presenting with chronic or intermittent bleeding as the sole clinical manifestation.

Aim. To report on the prevalence of small bowel GISTs in a prospectively recorded series of patients undergoing capsule endoscopy (CE).

Patients and methods. Between 2001 and 2007 five hundred patients were referred to our endoscopy unit for small bowel evaluation with capsule endoscopy. We retrospectively evaluated all charts. The main indications for CE were obscure-occult or obscure-overt bleeding. Two hundred eighty-nine patients underwent CE for either obscure-occult or obscure-overt bleeding and 211 for other indications. Patient outcome and care processes were measured by follow-up telephone interviews and chart review. Statistical computations were performed using Fisher's exact test and Student's t-test.

Results. CE identified a small bowel tumor in 20 patients (4.0%) and 9 tumors turned out to be GISTs (45.0%). Traditional endoscopic and radiological imaging failed to detect the GIST in all these cases. In one case a small bowel GIST was diagnosed by angiography and CE proved false negative. Overall, CE was able to diagnose a small bowel GIST in 9 out of 10 cases. All patients underwent surgical treatment and showed normalized hemoglobin levels at follow-up. The main limitation of this study is the small number of cases.

Conclusions. CE is an effective and sensitive diagnostic device compared with conventional radiology and plays an important role in the algorithm for the diagnostic work-up of suspected small bowel tumors.

Key words: gastrointestinal stromal tumors, capsule endoscopy, small bowel.

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