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POST-MYOTOMY SEPTUM (POMS) FOLLOWING POEM: INCIDENCE, CLINICAL OUTCOMES, AND MANAGEMENT IN A HIGH-VOLUME CENTER

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Background and Aim: Peroral Endoscopic Myotomy (POEM) is a highly effective treatment for achalasia and other esophageal motility disorders. However, some patients may develop recurrent symptoms during the follow-up period, often related to dilation of the distal esophagus, which is radiologically referred to as "blown-out myotomy." Endoscopically, we have observed the presence of a Post-Myotomy Septum (PoMS) in symptomatic patients. This study aims to assess the incidence of PoMS and evaluate the clinical outcomes in patients treated for this condition.
Material and Methods: A retrospective analysis was performed on patients who underwent POEM between 2012 and 2024. Patient records, including endoscopic images and videos from follow-up visits, were reviewed to identify PoMS, defined as the endoscopic presence of a distal esophageal septum, with or without an associated pseudodiverticulum. Key variables included the interval between POEM and PoMS detection, symptoms at the onset of the septum (Eckardt score), treatment strategies used, and patient response to these interventions (defined as an Eckardt score <3).
Results: A total of 595 patients were analyzed, with PoMS detected in 50 patients (8.4%). Of these, 74% developed PoMS following POEM for Type II achalasia. Four patients (8%) had received prior treatment before POEM, with 74% having undergone anterior myotomy. The median time from POEM to PoMS detection was 17.5 months, with 60% of PoMS cases identified within the first year post-POEM. PoMS with Eckardt score >3 was found in 19 out of 50 patients (38%), a significantly higher proportion compared to patients with a post-POEM Eckardt score >3 without PoMS (38% vs. 9.7%, $P < 0.001$). A total of 10 patients with PoMS were re-treated: 8 underwent re-POEM and septotomy, and 2 had pneumatic dilations. After treatment, all patients had an Eckardt score <3.
Conclusions: PoMS is a significant complication that typically presents several months after POEM and is associated with considerable symptom burden. Early detection and appropriate treatment lead to favorable outcomes in most cases, highlighting the importance of regular endoscopic follow-up in this patient population. Further studies are required to explore the relationship between this new condition and the technical aspects of myotomy, manometry, radiological findings, and long-term outcomes.

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EARLY ECONOMIC EVALUATION OF A MEDICAL DEVICE TECHNOLOGY TO ENHANCE COMPLETION RATES OF DIFFICULT COLONOSCOPIES

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Background and Aim: Colonoscopy is among the most frequently performed medical procedures globally. However, incomplete examinations due to difficulties in achieving caecal intubation are a common issue, leading to increased costs and delays in diagnosis and treatment. When a colonoscopy is incomplete, a second procedure, such as an additional optical colonoscopy or virtual colonoscopy, is typically recommended to ensure full exploration of the large bowel. A new medical device designed for standard colonoscopes has been developed to facilitate the completion of difficult colonoscopies. The study aimed to estimate the budget impact of introducing this medical device to manage colonoscopies deemed incomplete according to the "standard of care" (SoC) in the Italian clinical practice over a five-year period.
Material and Methods: A micro-costing analysis of the diagnostic procedure was performed from the hospital perspective. The National Healthcare System (NHS) perspective was considered by incorporating national reimbursement rates for healthcare services, along with costs associated with managing complications and potential diagnostic delays in patients with colon cancer. All cost estimates were adjusted to reflect 2024 values to account for inflation.
Results: Increasing the use of the device from 2% to 10% of colonoscopies deemed incomplete according to the SoC over five years could result in savings of €633,449 from the hospital perspective and €856,286 from the NHS perspective. Cost savings are observed as early as the first year, primarily due to the avoidance of second procedures. Sensitivity analyses, which let all model parameters vary, indicated potential savings of up to €1,691,686 for the entire five-year period.
Conclusions: Despite certain limitations due to the restricted patient care pathway and the lack of updated epidemiological data at national level, incorporating the medical device in the colonoscopies pathway could lead to significant cost savings from both the hospital and NHS perspectives. Further research is warranted to explore additional economic, organizational, and environmental benefits. Additionally, evaluating patient perspectives and preferences may identify further advantages of this technology.