IMAGES OF INTEREST

Gastrointestinal: Adenocarcinoma of the ileum

Surprisingly, adenocarcinomas of the small bowel are uncommon. Although the small bowel constitutes approximately 75% of the length and 90% of the mucosal surface of the alimentary tract, only 1-2% of adenocarcinomas occur in this region. These are more common in the duodenum than in the jejunum or ileum. The initial symptoms of small bowel cancer are often non-specific and include intermittent abdominal discomfort, nausea and abdominal distension. A minority of patients develop anemia. Subsequently, there are more obvious symptoms of a partial or complete small bowel obstruction.

Traditionally, the diagnosis of adenocarcinoma of the small bowel has been dependent on abnormalities on barium studies, either a small bowel follow-through study or a small bowel enema (enteroclysis). However, studies have been falsely negative in 10–30% of cases. Other diagnostic procedures include enteroscopy and, more recently, capsule endoscopy. Another option is a new generation, 16-row, multidetector computed tomography scanner that improves the resolution of abnormalities and decreases respiratory and bowel motion artefacts. The patient whose images are illustrated below presented with clinical features of a partial small bowel obstruction. As the level of obstruction was difficult to identify on axial images alone, we used two-dimensional and three-dimensional postprocessing techniques. Curved reconstructions, as well as three-dimensional volume rendering techniques, accurately visualized the site of transition and the underlying pathology (Figs 1 and 2). The presence of an 'apple-core' appearance was typical of small bowel cancer and this was confirmed at laparotomy. Although most ileal adenocarcinomas are 'sporadic', increased risks for this cancer have been reported in Crohn's disease, neurofibromatosis, ileostomy after colectomy and various urological procedures where the ureters or bladder are anastomozed to the ileum.

Contributed by

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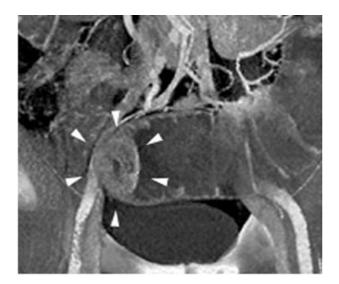




Figure 2

Reproduction of color photographs has kindly been sponsored by a grant from AstraZeneca.



Figure 1

Contributions to the Images of Interest Section are welcomed and should be submitted to Professor IC Roberts-Thomson, Department of Gastroenterology, The Queen Elizabeth Hospital, Woodville South, South Australia 5011, Australia.

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