

Megacolon and colonic perforation

A case recently reported by the coroner described a death due to faecal peritonitis from colonic perforation secondary to acute on chronic constipation with associated megacolon.

If acute cases of megacolon due to mechanical bowel obstruction, toxic colitis and colonic pseudo-obstruction are excluded, a group of patients with chronic constipation and megacolon are occasionally encountered in clinical practice. Hirschsprung's and Chaga's disease account for a proportion of these cases, as do drug and medication associated conditions (particularly narcotic addiction), but a significant number of cases are idiopathic.

Many of these cases represent difficult management problems, although in the majority medical measures including laxatives and enemas will resolve the situation of worsening constipation. Hospital admission, correction of dehydration and electrolyte disturbances, and disimpaction of faeces (usually under general anaesthesia) may sometimes be required.

Although rare, in some cases the constipation and colonic dilatation can be so severe that life-threatening complications may occur. In particular, colonic perforation with faecal peritonitis can lead to septic shock and death. The probable causes of perforation are stercoral ulceration (usually involving the sigmoid and rectum), colonic ischaemia due to vascular compromise (typically in the most dilated segment of the bowel, usually the caecum) and abdominal compartment syndrome.

While it is generally understood that laxatives and colonic lavage solutions are contraindicated in mechanical bowel obstruction, it is less commonly recognised that, although idiopathic constipation and megacolon do not have a mechanical basis, by further increasing the volume of fluid and stool in the colon, osmotic laxatives and colonic lavage solutions may actually precipitate colonic perforation. This factor was thought to have had a role in the cause of death in this case reported by the coroner. Caution in the use of these agents, where it is considered that perforation could occur, is strongly advised.

Probably because of the very low likelihood of serious consequences in constipated patients, surgery is rarely performed before perforation occurs. However, when perforation does occur, the faecal loading and consequent peritoneal contamination is so gross that the onset of overwhelming sepsis and death may be extremely rapid. In these cases, immediate laparotomy (with colonic resection, peritoneal decontamination and colostomy) is essential to preserve life.

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