Ogilvie's syndrome: a rare complication of inguinal hernia repair

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CASE REPORT

A 49-year-old man had an open, tension-free, mesh (Lichtenstein) repair performed under general anaesthetic for a left-sided direct inguinal hernia. His immediate postoperative recovery was uneventful and he was discharged the following day. He was readmitted as an emergency 2 days later with intermittent abdominal pain, nausea and complete constipation. On examination his abdomen was slightly distended, but was not tender. X-ray (*Figure 1*) showed dilated loops of small bowel with gas in the colon and rectum.

He was managed conservatively. However, over the next 24 hours his symptoms became worse with increasing abdominal pain and vomiting. He was still passing no flatus. His abdomen became more distended and generally tender to light palpation. Repeat X-ray (*Figure 2*) revealed markedly distended small bowel and a grossly distended caecum. He proceeded to theatre as the caecal distension was increasing and he had developed signs of peritoneal irritation.

At laparotomy his bowel was free from the left hernia repair and no mechanical cause for the obstruction was found. The colon was distended to the rectum and the caecum was 10 cm in diameter with tearing almost imminent. It was therefore decompressed with an aspiration needle and on-table sigmoidoscopy. Appendicectomy was performed and the stump used to place a caecostomy. Recovery was slow but he was discharged home 2 weeks after readmission.

INTRODUCTION

Acute colonic pseudo-obstruction (Ogilvie's syndrome) results in massive dilatation of the colon in the absence of any mechanical obstruction. Although described as a distinct clinical syndrome more than 50 years ago (Ogilvie, 1948), its pathophysiology remains unclear. This severe form of adynamic ileus is associated with a wide variety of medical and surgical conditions (Dorudi et al, 1992) and occurs most commonly after obstetric, cardiothoracic, orthopaedic or neurosurgical procedures (Tenofsky et al, 2000). In most cases conservative treatment is sufficient; however, open decompression may have to be performed.

A surgical caecostomy is associated with high morbidity and mortality (Nanni et al, 1982; Vanek and Al-Salti, 1986). The authors believe this to be the first reported case of a routine inguinal hernia repair that has required open decompression by caecostomy as a result of complications of Ogilvie's syndrome.

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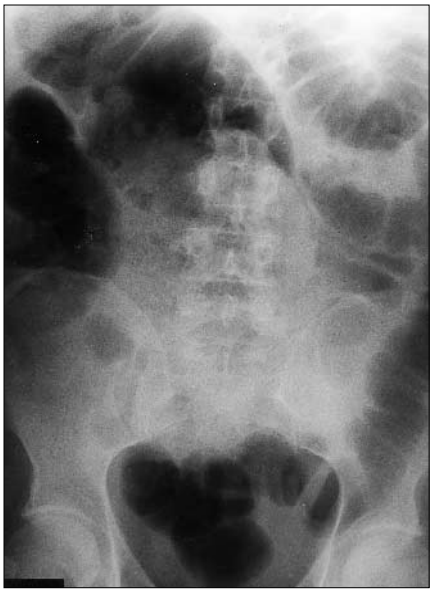
Figure 1. Abdominal radiograph 2 days post inguinal hernia repair showing distended loops of small and large bowel.



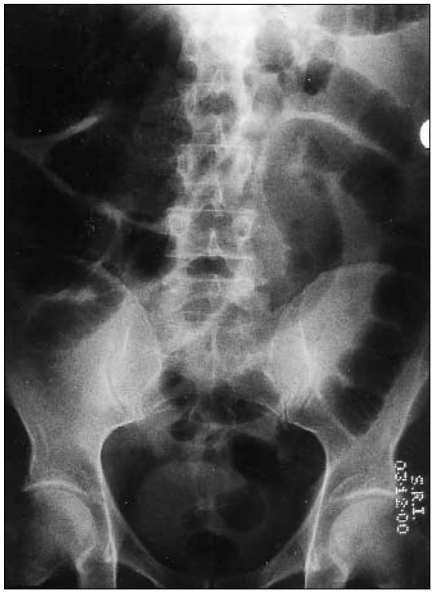
DISCUSSION

In 1948, Ogilvie described two cases of acute colonic pseudo-obstruction and attributed the syndrome to sympathetic deprivation of the large intestine. Although the exact pathophysiology is yet to be established, most current research suggests the syndrome results from incompetent colonic motility caused by excessive sympathetic stimulation, parasympathetic dysfunction or both (Ponec et al, 1999).

An open mesh inguinal hernia repair under general anaesthetic is one of the most common general surgical operations, and life-threatening postoperative complications are rare (Hair et al, 2000). To the authors' knowledge, a case of Ogilvie's syndrome following an inguinal hernia repair that required subsequent surgical caecostomy has yet to be reported.

Ogilvie's syndrome is a rare, life-threatening postoperative complication with varying incidence and no single identifiable cause (Nanni et al, 1982; Dorudi et al, 1992). Vanek and Al-Salti

Figure 2. Abdominal radiograph 3 days post inguinal hernia repair showing a grossly distended caecum and distended loops of small bowel.



(1986) found caesarean section to be the most common procedure to precede Ogilvie's syndrome in 400 cases while Tenofsky et al (2000) showed coronary artery bypass grafting to be the most common.

Ogilvie's syndrome must be recognized early and treated appropriately to avoid caecal perforation. The reported incidence of caecal perforation in Ogilvie's syndrome varies widely; however, it is associated with a mortality rate of 50% (Strodel et al, 1983). The risk of perforation was found to be related more to the duration of caecal distension than to absolute caecal size (Johnson et al, 1985). Non-operative management is usually attempted initially with nasogastric suction, fluid resuscitation, enemas and the possible use of the parasympathomimetic agent neostigmine (Ponec et al, 1999). Colonoscopic decompression is recommended if conservative treatment fails. These measures are successful in the majority of cases.

If unsuccessful, most authors would advocate surgical decompression with caecostomy (Strodel et al, 1983; Vanek and Al-Salti, 1986; Tenofsky et al, 2000). Laparotomy is indicated if peritoneal irritation is present (Dorudi et al, 1992). Surgical decompression with caecostomy has a mortality rate between 30% (Vanek and Al-Salti, 1986) and 60% (Tenofsky et al, 2000).

CONCLUSIONS

This case report describes acute colonic pseudo-obstruction arising after inguinal hernia repair, which was successfully treated with a surgical caecostomy. Although Ogilvie's syndrome is more common after certain surgical procedures, it is important to be aware of the possibility of the syndrome developing and its potential lethal sequelae in any postoperative patient. HM

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Johnson DC, Rice RP, Kelvin FM, Foster WL, Williford ME (1985) The radiological evaluation of gross cecal distension: emphasis on cecal ileus. *Am J Roentgenol* **145**: 1211–17

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Ogilvie H (1948) Large-intestine colic due to sympathetic deprivation: a new clinical syndrome. *BMJ* **ii**: 671–3

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Tenofsky PL, Beamer LR, Smith S (2000) Ogilvie's syndrome as a postoperative complication. *Arch Surg* **135**: 682–6

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IN THE PUBLIC'S VIEW...

Don't waste your money

The National Lottery is the best way yet devised of taking money from the poor and giving it to the rich. I have never bought a ticket. The best two 'things you didn't know' about the lottery are that if you buy a ticket on a Wednesday you are more likely to die before the Saturday draw than win the big one, and that you are more likely to end up in hospital with a fridge-related injury than to win the lottery. In August, someone won the biggest prize yet: £20.1 million. Not surprisingly the media took an interest.

The *Guardian* went for the ridiculous headline, 'Patient claims £20.1m…' People are rightly critical of 'Wife wins lottery' headlines, as if marital status defines the person. So what makes someone a patient? What if you'd found out about your lottery win when just about to go off down the surgery to have your ears syringed? The *Independent* made it clearer: 'Cancer patient to use £20m Lottery win to fight disease'. Yes, once you've got cancer you are defined by the disease. At first, I thought the headline meant her windfall would fund research or support for people with cancer. Sadly not. Iris Jeffrey's daughters want her to look overseas for treatments not available on the NHS.

A retired intensive care consultant told me that the most upsetting experiences of an upsetting specialty were the relatives who had pleaded for their dear ones to go private, in the mistaken belief that money would buy survival. Indeed there are some expensive treatments not available on the NHS, but mostly they are experimental if not blatantly untested. Many of them are more likely to cause serious complications or death than to improve matters.

Iris Jeffrey has cancer of the oesophagus. The *Independent* described her as having chemotherapy 'as she waits for an operation'; more accurate would have been 'to prepare her for an operation'. Whatever treatment she is getting on the NHS (for which Mrs Jeffrey had nothing but praise) will be the best there is for a difficult cancer. Looking abroad for 'all available treatments' will ensure only that there is less money to pass on.

Money didn't do Linda McCartney or George Harrison any good. There are plenty of people out there anxious for Mrs Jeffrey's money. Many have probably already contacted her. Otherwise the internet is full of them, as Professor Edzard Ernst (Schmidt and Ernst, 2004) warned in a recent paper reported in many of the newspapers. My advice to Mrs Jeffrey is to do what we are always told not to: spend, spend, spend. Then ensure her family is well provided for. And leave the rest to a hospice to ease the burden of other patients and families. Then she will be remembered for a good deed, rather than for a media-hounded chase around the world, getting more and more ill while charlatans empty her purse. HM

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