OGILVIE'S SYNDROME POST CAESAREAN SECTION – a case report

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INTRODUCTION

We describe a case of Ogilvie's syndrome or acute colonic pseudo-obstruction in a 28-year-old lady post caesarean section. The patient's condition was complicated by sepsis and caecal perforation for which she underwent exploratory laparotomy, right hemicolectomy, ileostomy and mucus fistula formation. Following the operation she made a full recovery and was discharged.

CASE REPORT

A 28-year-old (Gravida 1 Para 0) lady was admitted for elective caesarean section for twins. Caesarean section was carried out successfully and two healthy babies delivered. Three days following the caesarean section, she started experiencing gradual abdominal distension and absolute constipation. Seven days after delivery, the patient's general condition deteriorated dramatically and general surgical opinion was consulted. Clinical examination revealed a septic patient with grossly distended abdomen, tenderness at the right iliac fossa, and high-pitched bowel sounds. Plain abdominal film obtained showed gross distension of the colon in the upper abdomen and free peritoneal gas under the right hemidiaphragm was obvious on the erect chest X-ray (Figures 1 & 2). In view of above, a decision of exploratory laparotomy was made for clinical large intestinal obstruction, which had perforated. Gross faecal contamination was encountered on entering the peritoneal cavity and there was a 1.5 cm perforation at the lateral wall of the caecum/ascending colon with patchy gangrene. The right and transverse colons were grossly dilated but no lesion was found on remaining of the large bowel. There was also retroperitoneal haematoma on the right up to the level of perinephric area ipsilaterally.

Subsequently, limited right hemicolectomy, ileostomy and transverse colon mucous fistula formation was performed. Following the operation, the patient was managed in the intensive care unit (ICU) where she received inotropic and ventilatory support. After stabilising her critical condition, she was discharged to the general surgical ward for further management. She was discharged three weeks later.

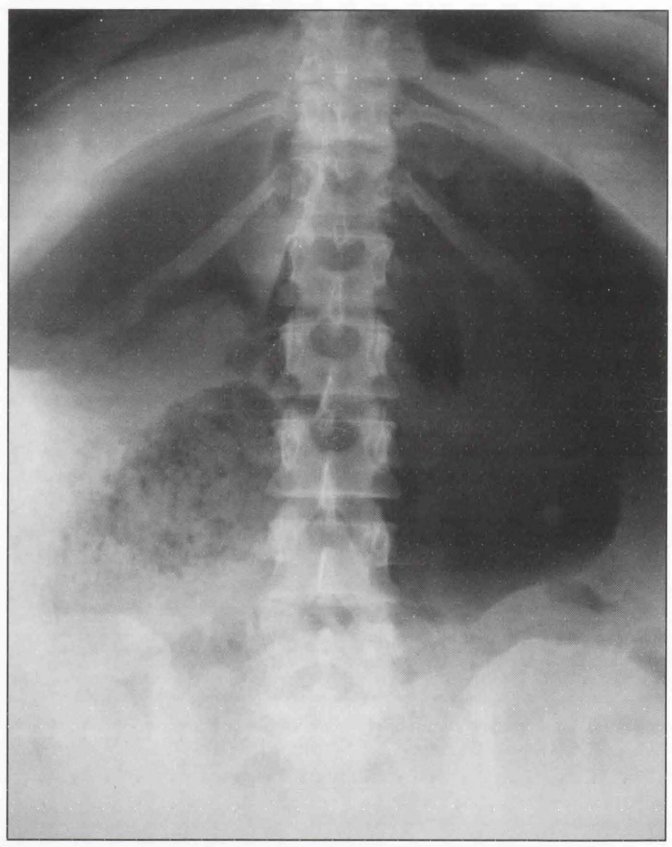

Figure 1 Supine abdominal X-ray

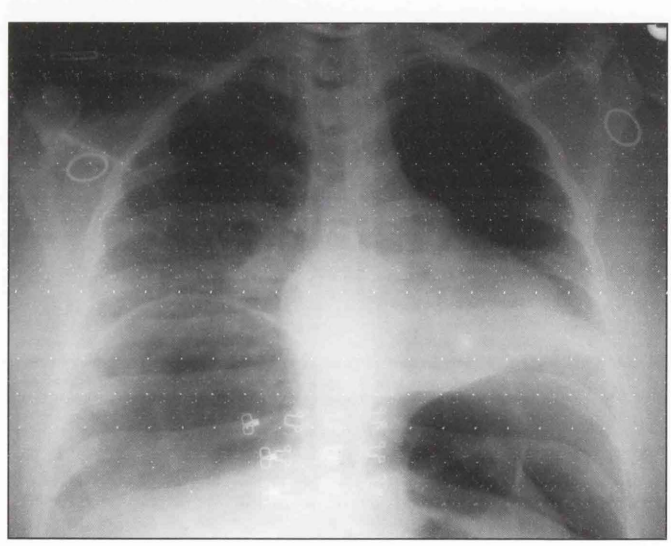

Figure 2 Erect chest X-ray

DISCUSSION

Ogilvie's syndrome or acute colonic pseudo-obstruction is a rare condition. It was first described by Sir Heneage Ogilvie in 1948 when reporting two cases of massive colonic dilatation without any mechanical obstruction[1].

Colonic pseudo-obstruction usually develops in hospitalised patients. The mortality rate in medically treated patients has been reported to be 14%; in surgically treated patients it is 30%. The most serious complication of colonic pseudo-obstruction is perforation of the caecum. The reported incidence of caecal perforation is 3–40%, and the associated mortality rate is 40–50%[2].

A large percentage of reported cases shows that Ogilvie's syndrome has occurred after obstetric and gynaecological procedures and caesarean section in particular. Up to 1993, there were 41 cases of caesarean section related colonic pseudo-obstruction reported in the literature[3]. Colonic pseudo-obstruction is also associated with a range of surgical and medical conditions such as trauma, pregnancy, burn and cardiothoracic, pelvic, spinal cord or orthopaedic surgery. Electrolyte imbalance, uraemia, hypothyroidism, sepsis, heart failure, myocardial infarction and pulmonary embolism are the other medical conditions which can lead to Ogilvie's syndrome[4].

The exact pathophysiology of Ogilvie's syndrome remains unclear. Current theories suggest the idea of an imbalance in the autonomic nervous system. These theories focus on the increased sympathetic tone, the decreased parasympathetic tone or a combination of both. One theory also hypothesises that if the parasympathetic sacral plexus (S2-S4) becomes disrupted the distal colon may become atonic thus resulting in a functional obstruction[5].

Surgical patients begin developing symptoms which are often insidious in onset three to five days after their operative procedure. Massive abdominal distension is a prominent and constant sign. Abdominal pain, nausea, vomiting, constipation and diarrhoea have also been observed in patients with Ogilvie's syndrome. Abdominal tenderness is noted in patients with perforated or ischaemic bowel and in patients with viable bowel[2].

A plane abdominal X-ray is the single most useful test. Severe colonic dilatation involving the caecum, ascending and transverse colon, is a common finding on abdominal radiography[6]. Colonoscopy can differentiate colonic pseudo-obstruction from mechanical obstruction and can also be used as a therapeutic procedure[7].

Once the diagnosis has been made, conservative management must be commenced. Enteral feeding is withheld, nasogastric and/or rectal tube inserted, adequate intravenous fluid administrated, electrolyte imbalance corrected and drugs that inhibit gastrointestinal motility discontinued. Cholinesterase inhibitors, such as neostigmine, have been effectively tried[6].

Surgery is indicated when conservative measures have failed or when clinical signs of ischaemia, abdominal sepsis, or perforation are evident. The choice of surgical procedure is dictated by the status of the caecum: resection is indicated if necrosis or ischaemia is evident. Whether to perform a primary anastomosis or a diversionary procedure depends on the presence of perforation and the extent of faecal contamination. The remaining large bowel must be inspected to exclude any remaining areas of ischaemia, necrosis, or perforation[2].

CONCLUSION

Ogilvie's syndrome or colonic pseudo-obstruction is a rare but potentially dangerous condition in hospitalised patients. In the presence of relative symptoms a high level of suspicion is necessary. The appearance of rapidly increasing abdominal distension therefore warrants detailed assessment with frequent abdominal examinations supplemented by appropriate radiological investigation. Conservative management with early surgical consultation is advisable in patients suspected or diagnosed with Ogilvie's syndrome. This case demonstrates how delays in diagnosis may lead to serious complications with potential mortality.

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