INTRODUCTION

Ogilvie's syndrome (OS), also known as acute colonic pseudo-obstruction, is a massive dilation of the colon in the absence of mechanical obstruction, first reported in 1948.1 In young women, this syndrome is most commonly associated with caesarean section (CS), but can also occur following vaginal or forceps delivery or sometimes even during pregnancy, multiple pregnancy and preterm labour. The syndrome remains difficult to diagnose and can result in significant morbidity and mortality (31% and up to 45%) in postoperative patients, therefore, an early diagnosis is essential to prevent serious disability and death.2

Caesarean section is the most frequent abdominal operation carried out in obstetric practice. It has been continually increasing globally since the last 3 decades due to its relative safety, being a preferred mode of delivery, improvement of surgical technique and postoperative care. However, the parturients undergoing CS are still exposed to a substantial rate of short and long-term complications. In this regard, several cases of colonic perforation, secondary to OS have been reported following caesarean section.3

We report a case of OS, secondary to CS, in which an early detection by senior clinicians resulted in successful management and excellent outcome.

CASE REPORT

A healthy, 25-year-old woman (gravida 1, parity 0) in her first pregnancy presented at her expected date of delivery to the Maroof International Hospital, Islamabad. On examination, she was in active labour at 3 cm dilatation and became fully dilated within 3 hours entering her second stage of labour. She failed to deliver, a vacuum delivery was attempted which also did not help, so an urgent caesarean section was decided. The operation was done under general anaesthesia in 20 minutes with minimal blood loss and without any operative complications. The operation resulted in delivery of a healthy baby girl, weighing 3.5 kg having a good Apgar score.

Postoperatively, the patient initially recovered well, although she required paracetamol (1g 4 x daily) and dihydrocodeine (60 mg 4 x daily) for analgesia. On postoperative day 1, she developed abdominal distension and shoulder-tip pain, which progressed to colicky central abdominal pain without vomiting; although she had passed flatus. Physical examination revealed soft abdomen with mild right-sided abdominal tenderness. The bowel sounds were present but sluggish. An initial diagnosis of Paralytic Ileus was made. She was kept nil by mouth, on intravenous fluids and antibiotic cover, however, laboratory reports showed leukocyte count, serum sodium and potassium levels within normal limits.

On the second postoperative day, her abdominal pain and distention gradually increased and she vomited once. On advice of the surgeon, her X-ray abdomen (Figure 1) and CT abdomen (Figure 2) revealed widespread colonic dilatation upto 8 cm with no free air; that helped in making provisional diagnosis of acute colonic pseudo-obstruction.

A rectal tube was passed after which the patient passed a lot of flatus and some fluid, following which she felt greatly relieved and her abdominal distension decreased gradually. The tube was removed after 3 hours and the patient was observed critically for next 24 – 48 hours till she started passing flatus on her own.

ABSTRACT

Ogilvie’s syndrome (OS), a massive dilation of the colon in the absence of mechanical obstruction, is a rare postsurgical complication. The high mortality rate (normally 15 – 31% and up to 45% after caecal perforation) explains the seriousness of this clinical situation. Early diagnosis is made by plain abdominal X-ray and CT abdomen. Conservative treatment is usually effective and surgery should be reserved for complicated cases or refractory to conservative treatment. We report a case of 25 years primigravida who developed OS, 24 hours after cesarean section, which was treated by conservative methods.

Key words: Ogilvie’s syndrome. Caesarean section. Colonic dilatation. Acute colonic pseudo-obstruction.
Liquids were started on next day and were followed by semisolid. She also passed stools and was discharged on the fifth postoperative day after being completely recovered.

DISCUSSION

Acute colonic pseudo-obstruction (Ogilvie’s syndrome) has been described by a clinical and radiological picture of acute large bowel obstruction without a mechanical cause. It is a rare postsurgical complication. In a young female, is most commonly associated with obstetric and gynaecologic surgery; though it has also been reported after immobility, drug intake, electrolyte disturbance, trauma, severe burns and serious infections. Recently, its association has also been found with coronary artery bypass surgery, total joint replacement and neurologic disorders. Though rare, it can have serious consequences in terms of maternal morbidity and mortality if undiagnosed and untreated at right time.

The exact pathophysiology of OS is still unclear and is said to be multifactorial. The colonic motility requires integration of myogenic, neural and hormonal influences. The parasympathetic system promotes, while the sympathetic stimuli inhibit the gut motility. The neurons in the enteric plexuses release factors that stimulate inter-neurons which transmit excitatory signals proximally, causing contraction and inhibitory signals distally that in turn cause relaxation by neurotransmitters, acetylcholine and serotonin.

Acute colonic dilation in OS is claimed to be due to an imbalance between sympathetic and parasympathetic innervation to the colon, with an overall excess in sympathetic activity leading to reduced colonic motility and functional bowel obstruction. The temporary neuropraxia of the sacral nerves lying in close proximity to the structure at risk during CS, including the cervix and the vagina before supplying the colon could be injured during surgery or trauma to this area.

Management of OS can be classified into conservative and surgical treatment although arguably diagnosis and recognition are the most important aspects of care. The initial treatment for OS includes placement of a nasogastric tube, enemas, fluid restoration, and correction of electrolyte abnormalities. Antibiotics can be added to provide some coverage for patients who are suspected to have bowel ischaemia or perforation.

The conservative management is thought to be successful and effective in 70 – 85% of the cases even in patients with painful abdomen and < 9 cm dilatation of the caecum and colon. However, it is difficult to perform, with more chances of re-occurrence and small risk of perforation.

In this case, only conservative management was done by corrections of the fluid, electrolyte balance and passage of the flatus tube. Studies showed that colonoscopic decompression, with or without placement of an indwelling tube should have been employed as part of the management.

Pharmacological treatment includes Naloxone, cholinergic stimulation with Neostigmine or Erythromycin and Cisapride. The surgical treatment is indicated when the caecal diameter is > 9 cm or there is evidence of perforation; and comprises either caecostomy or, if ischaemic bowel is present, limited right hemicolectomy with or without primary anastomosis.

REFERENCES