

Full term pregnancy with severe faecal impaction resulting in Megarectum and Megacolon

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Introduction: Megacolon, characterized by an abnormally dilated colon, is rare during pregnancy, but can complicate it. It can lead to maternal morbidity and mortality, as well as negative obstetrical outcomes. Pregnancy can worsen chronic constipation through hormonal and mechanical factors, which may contribute to megacolon

Case report: 21year primigravida, was admitted to LW with a history of rupture of membranes, in labour. She had regular USS with normal growth velocity.

The patient was contracting regularly. She wanted Caesarean section and hence the doctor wanted to examine her before taking her to theatre. On examination in room, a large firm to hard mass was felt low in the vagina, arising from the posterior wall.

On careful examination, the doctor was unable to go behind and to the sides of the mass. The mass was almost obstructing the whole vagina allowing only one finger below the symphysis pubis. It was arising from the posterior vaginal wall into the vagina – very firm to hard. It was impossible to reach the cervix. PR was not possible in room as patient was very uncomfortable.

Examination under anaesthesia, before LSCS, confirmed huge amount of very hard impacted stool on PR. Catheter was inserted, and adequate clear urine was drained.

On inspecting the abdomen, the lower segment was found to be very distended. It appeared as if there is a Bandle’s ring following obstructed labour;

During LSCS no Bandl’s ring was found, however the lower segment was relatively thin, as if the head was pushed against the anterior wall of the lower segment. Baby cried at birth. Uterus was closed in layers.

Exploration of the abdomen, after exteriorising the uterus, showed a hugely distended rectum and colon of about 15-20 cms in diameter, behind the uterus. It was extending all the way up to the splenic flexure. The mass was firm to soft in consistency throughout.

The findings were confirmed by Surgery colleague. Decision for conservative management with phosphate enema, glycerine suppositories and oral laxatives in the postoperative period was taken and a surgery review the next day was planned.

The patient was debriefed in the immediate post operative period.

She informed that she had some mild abdominal pains only which she put it down to pregnancy.

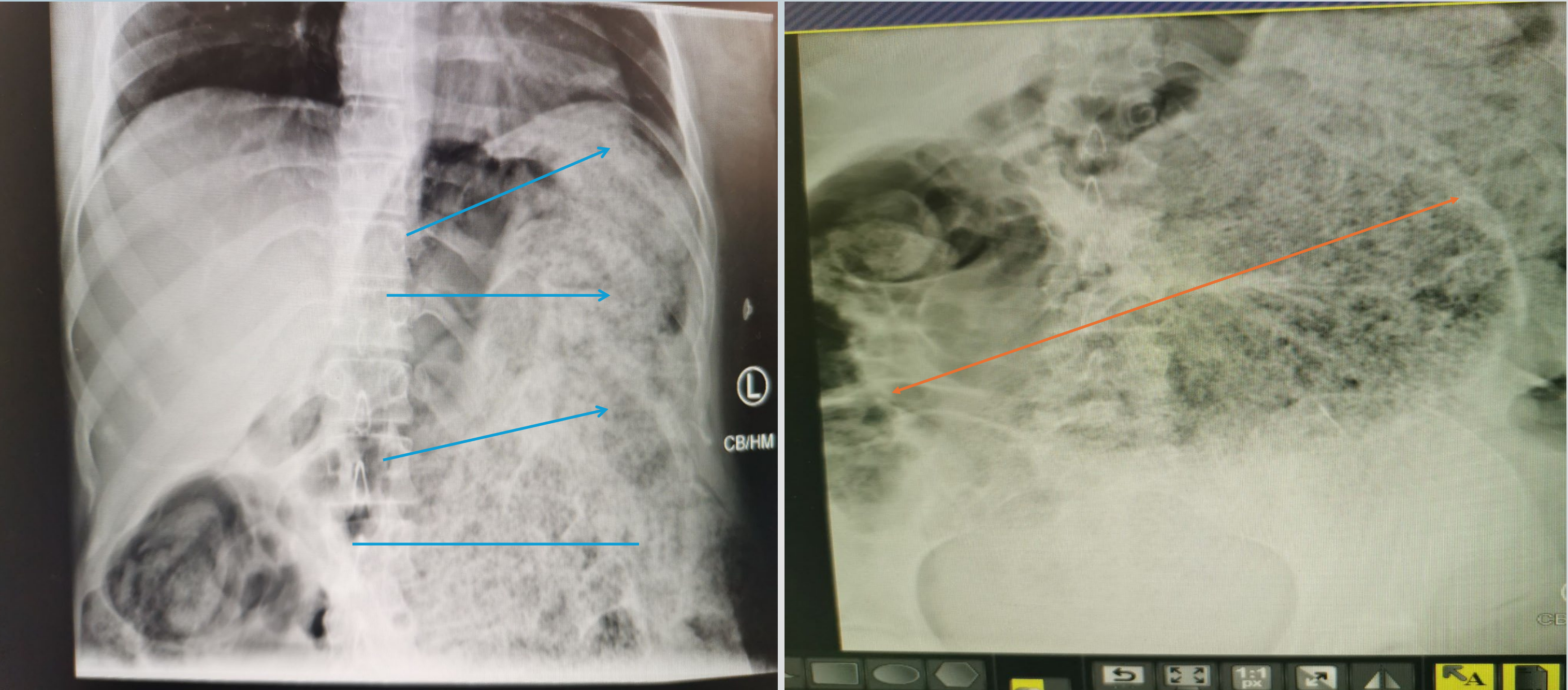
She never had any significant symptoms to be concerned.

Patient had post operative abdominal X ray which showed hugely distended colon up to the splenic flexure.

On review the next day, the surgery team did a manual evacuation of the rectum as patient was still unable to pass stool. Patient was started on Movicol and high fibre

cereal. The patient started to pass stool normally after that. Her bloods including electrolytes were all normal.

Patient made an uneventful recovery. She has been booked for a follow up with the surgeons later.



X Ray showing distended descending colon and Sigmoid

Discussion: Megacolon is an abnormal dilatation of the colon that is not caused by mechanical obstruction

A human colon is considered abnormally enlarged if it has a diameter greater than 12 cm in the cecum (it is usually less than 9 cm), greater than 6.5 cm in the rectosigmoid region and greater than 8 cm for the ascending colon. The transverse colon is usually less than 6 cm in diameter.

Types: Megacolon can be classified as acute or chronic depending on whether the dilation is temporary or ongoing. All cases of acute megacolon are acquired, whereas chronic megacolon can be both acquired or congenital. Acute megacolon, also known as Ogilvie syndrome, is associated with damage to the autonomic nervous system and often occurs in ill or postoperative patients with no clear cause.

In pregnancy: This condition can be associated with complications like dystocia, premature birth, and systemic toxicity. A multi-disciplinary approach, including genetic counselling and delivery planning, is often necessary. Hormonal changes (specifically progesterone) and the physical pressure of the growing uterus can worsen constipation, a common symptom of megacolon, during pregnancy.

Causes: Congenital or aganglionic megacolon

•Medication: Risperidone, an anti-psychotic medication; Clozapine; Loperamide;

•Acquired megacolon, of which there are several possible causes:

- Idiopathic megacolon

- Toxic megacolon

- Megacolon secondary to infection

 - Clostridium difficile, Salmonella, Shigella,

 - Trypanosoma cruzi (Chagas disease)

- Pheochromocytoma, possibly secondary to its presenting constipation,

- Other neurologic, systemic and metabolic diseases – Diabetic neuropathy; SLE; Scleroderma; Muscular dystrophies.

Diagnosis is achieved mainly by plain and contrasted radiographical and ultrasound imaging.

A colonoscopy can also be used to rule out mechanical obstructive causes. Anorectal

manometry may help to differentiate acquired from congenital forms.

Rectal biopsy is recommended to make a final diagnosis of Hirschsprung disease.

Genetic counselling is also needed with family history of congenital causes.

Treatment: Possible treatments include:

- Stable cases are effectively treated with laxatives and bulking agents, as well as modifications in diet and stool habits.

- Corticosteroids and other anti-inflammatory medications are used in toxic megacolon.

- Antibiotics are used for bacterial infections such as oral vancomycin for *Clostridium difficile*

- Disimpaction of faeces and decompression using anorectal and nasogastric tubes are used to treat megacolon.

- When megacolon worsens and the conservative measures fail to restore transit, surgery may be necessary.

There are several surgical approaches to treat megacolon, such as a colectomy (removal of the entire colon) with ileorectal anastomosis (ligation of the remaining ileum and rectum segments), or a total proctocolectomy (removal of colon, sigmoid and rectum) followed by ileostomy or followed by ileoanal anastomosis.

References:1) Guerra S, Saccone G, et al. Megacolon Diagnosis in pregnancy: A case report and literature review; European Journal of Obstetrics & Gynaecology and Reproductive Biology; 2024, Vol:300, (124-128);

2) Sayed El-Akhras et al; Huge Megacolon Complicating Chronic Colonic Volvulus in a Pregnant Lady with Partial Hirschsprung Disease: A Case Report and Review of the Literature; Annals of Clinical Case Reports; Sept 2022.