

DIAGNOSIS OF BOCHDALEK HERNIA IN POSTNATAL PATIENT

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Background

A Bochdalek hernia is a rare type of diaphragmatic hernia, where a hole in the diaphragm results in abdominal organs to protrude into the thoracic cavity. It is a congenital diaphragmatic hernia, and its symptoms are often exacerbated during pregnancy because of the increased intra-abdominal pressure caused by the gravid uterus.

Case Presentation

A 29 year old primigravid patient, who had been identified as low risk had been diagnosed with pre-eclampsia at 32+3/40 after being referred for obstetric review after seeing her community midwife. USS at 32+3 had also shown IUGR with abnormal dopplers. She was admitted on the same day and commenced on antihypertensives and was given antenatal corticoid steroids. She underwent an emergency Caesarean section at 33+1/40 due to worsening pre-eclampsia. She delivered a live male infant via CS and had an estimated blood loss of 500mls.

Day 1 postnatally, she had reported some dizziness and had mobilised to the toilet to vomit. Following this episode she became short of breath, had reduced oxygen saturation and tachycardia.

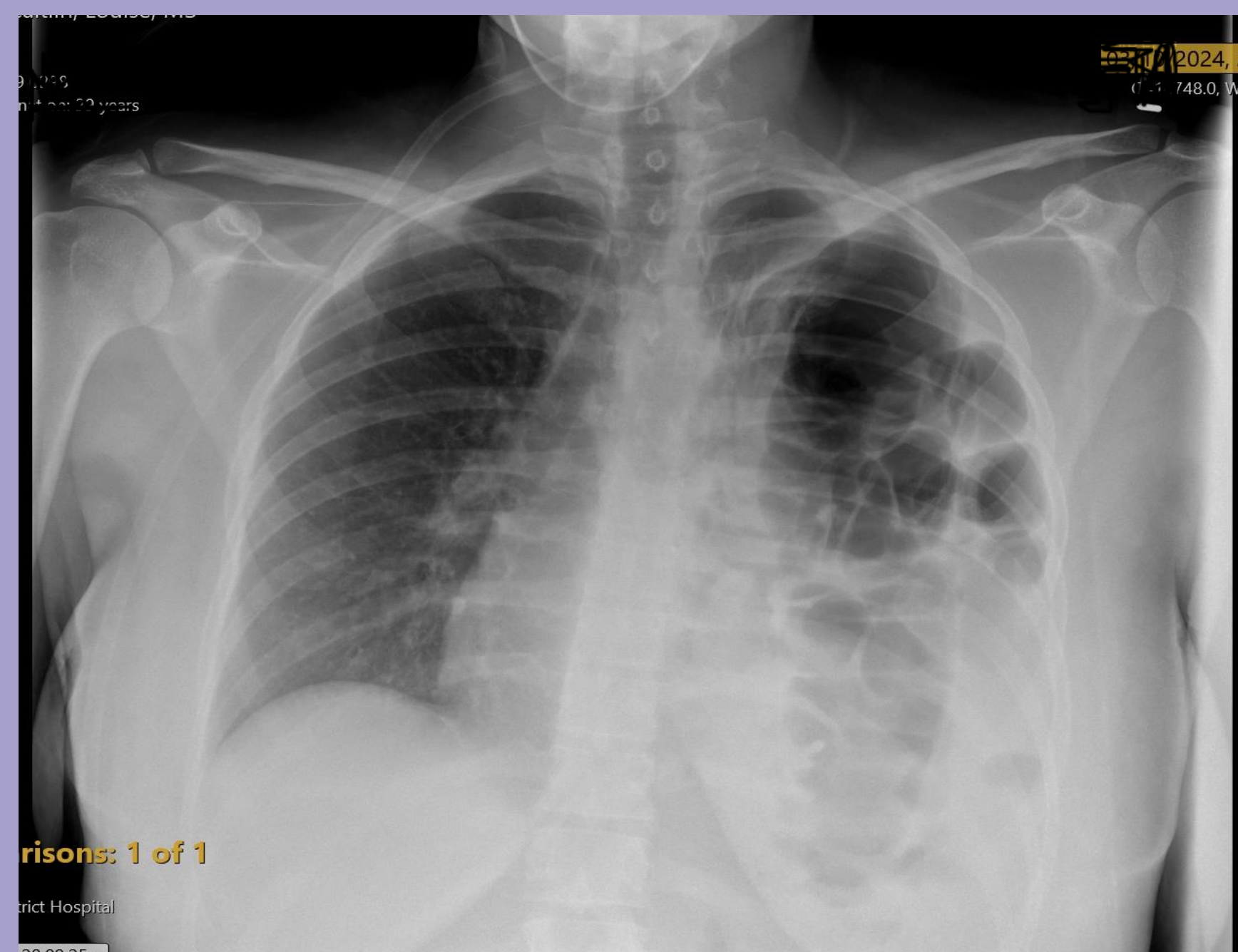


Figure 1: Chest X Ray Image showing presence of bowel loops occupying the left Hemithorax

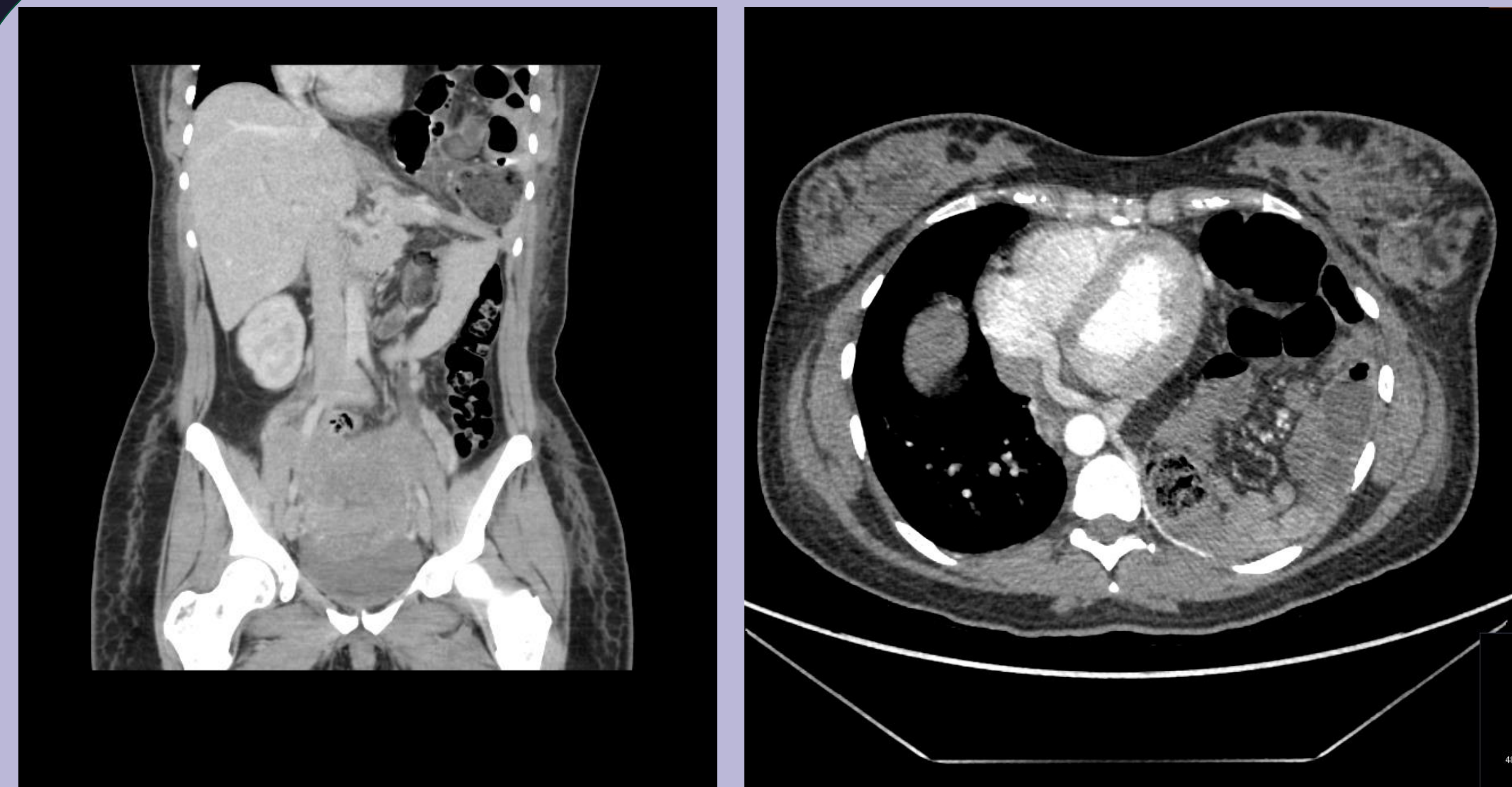


Figure 2 and 3: CT scan of Longitudinal and Sagittal sections showing Bochdalek hernia. Note the presence of bowel loops almost completely occupying the left hemithorax

She had a chest x-ray which showed the presence of loops of bowel occupying the left hemithorax. A subsequent CT scan revealed a Bochdalek hernia with GI structures occupying the left hemithorax. She underwent a laparoscopic reduction and repair of the Bochdalek hernia. She remained as an inpatient for a week after the hernia repair and required additional pharmacological management of her hypertension with amlodipine, which was then switched to enalapril. She was then transferred to midwifery led care until she was discharged to her GP 14 days postnatally.

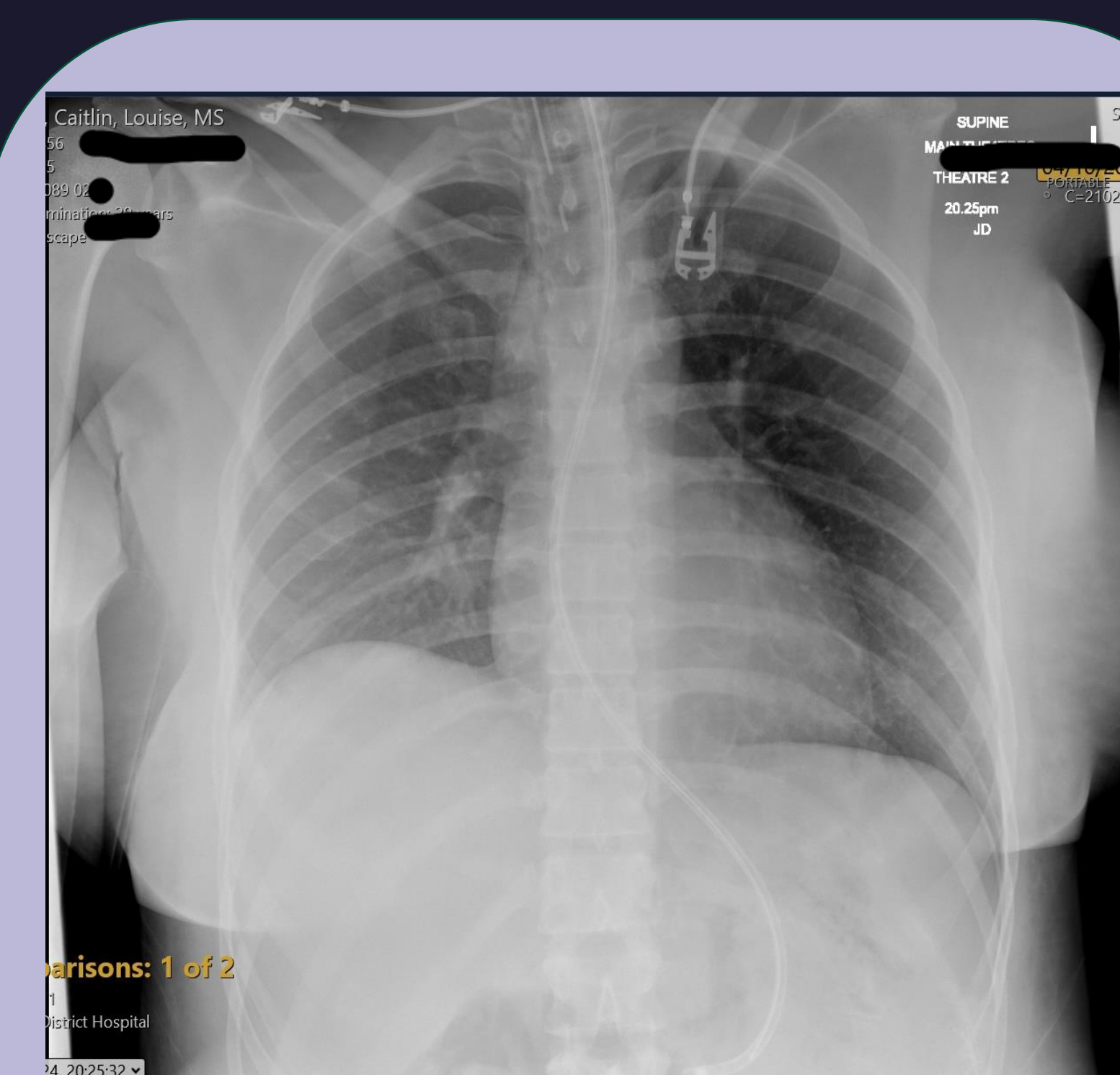


Figure 4: Chest X Ray post Laparoscopic reduction of Bochdalek Hernia

Conclusion and Discussion

Bochdaleck hernias are a rare condition, which results in a hole in the diaphragm, resulting the protrusion of abdominal organs into the thoracic cavity. It has an incidence of about 0.17% and from 1928 – 2006; 35 cases had complicated pregnancy.

During pregnancy, due to the increase in intraabdominal pressure it can lead to shortness of breath, difficulty in breathing, respiratory failure, abdominal pain, difficulty in eating and signs of bowel obstruction. This can especially dangerous as it can lead to death. Because of this, it is important to be able to recognise these symptoms and treat the hernia as soon as possible. Other case reports had highlighted the importance of CXR in diagnosis.

Treatment is in the form of surgical reduction of the hernia and if there is evidence of a strangulation hernia, an end-to-end anastomosis may be necessary.

In our case the patient became symptomatic after delivery, however in cases where women had become symptomatic during pregnancy were operated on during pregnancy and subsequently were delivered at term by c-section.

What is unique about this case, was that the patient was completely asymptomatic during her pregnancy, nor was she aware that she had a Bochdalek hernia until she had become acutely unwell following delivery. It is believed that she may have suffered with an acute herniation likely, because of the increased intra-abdominal pressure from pregnancy and the vomiting following her caesarean section.

References

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