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"Spontaneous" Rupture of the Maternal Diaphragm

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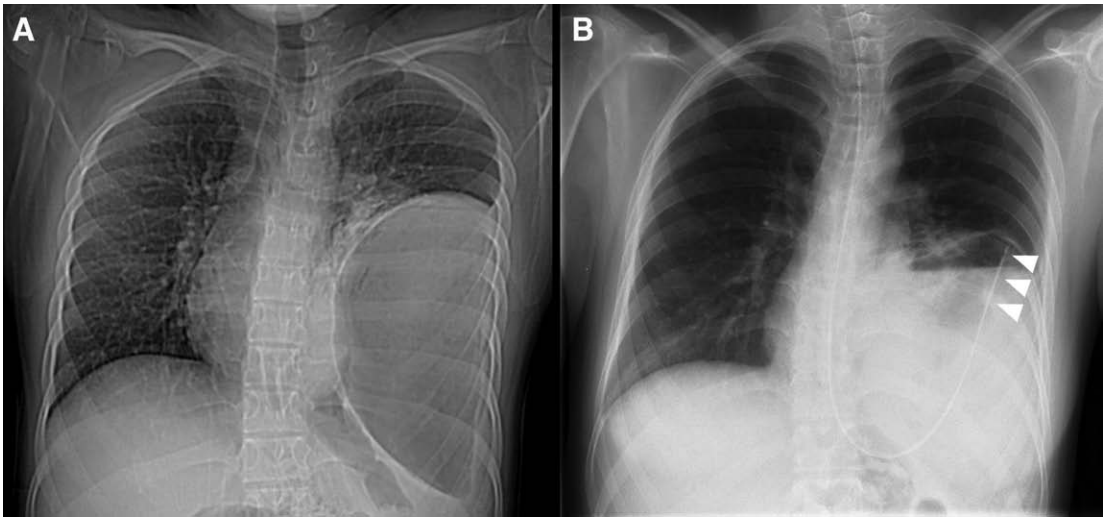

A 26-YR-OLD previously healthy nulliparous woman, weighing 47.0 kg, at 26 weeks' gestation, reported a dramatic increase in left-side upper back pain immediately after defecation. Her refractory backache was noted at 13 weeks of pregnancy, but the cause of the pain had remained undiagnosed, even after the patient had experienced frequent vomiting over the last month. A computed tomography scout film showed the mediastinal shift by a large bulla in the left hemithorax (fig.A), and the gastric tube's end demonstrated the displacement of the stomach beyond the diaphragm (fig. B, arrow). The emergent laparotomy revealed the herniation of stomach, transverse colon, and spleen through a 10-cm tear of the posterolateral part of the left diaphragm, which corresponds to the most common site of Bochdalek's hernia. The mother survived to discharge, and a healthy infant was delivered subsequently by cesarean section.

Spontaneous rupture of the diaphragm during pregnancy is extremely rare and is associated with high mortality.[1] An increase in the intraabdominal pressure caused by an enlarged uterus likely is an exacerbating factor of a preexistent asymptomatic diaphragmatic hernia.[2] Back pain is a frequently encountered symptom in expectant mothers, increasing the possibility that the cause of backache will not be diagnosed; the chance of diagnosis is even less in patients with impending diaphragmatic rupture, when anesthesiologists meet the parturient at delivery. Bochdalek's hernia has an unexpectedly high incidence of 0.17% in the adult population.[3] For early diagnosis and treatment of potentially fatal diaphragmatic rupture, severe back pain in any pregnant women should not be ignored.

References

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