

Asymptomatic Bochdalek Hernia in Adults on CT scan

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Abbreviations: CT: Computed Tomography; HB: Bochdalek hernia

Clinical Image

Bochdalek Hernia (BH) in adults is a late manifestation of congenital diaphragmatic hernia, and occurs in 10-30% of cases [1]. It poses a diagnostic problem because it can remain asymptomatic for a long time, and unrecognized by an uninformed radiologist (during imaging performed for another symptomatology), and be discovered on the occasion of complications. When it becomes symptomatic, the clinical picture remains polymorphic associating respiratory signs (dyspnea) by compression or compaction of the adjacent pulmonary parenchyma; and digestive (occlusive syndrome, hemorrhagic ulceration or diastatic or ischemic perforation) by strangulation of the intra-abdominal viscera (liver, stomach, spleen, colon, etc.). Cardiac arrest can also occur due to a decrease in vena cava return by displacement of the mediastinum. The diagnosis of BH can be evoked on the chest X-ray in front of a heterogeneous postero-lateral projected image made of opacities and clarities, or the presence of a gastric air pocket in the intra-thoracic, or diges-

tive loops in the basithoracic. However, this technique has limitations because several other hypotheses can simulate BH causing false positives, namely: a pulmonary or mediastinal tumor, an emphysema bubble, a pulmonary abscess or a pleuropneumopathy.

The gold standard for the diagnosis of BH is the scanner which will identify the diaphragmatic defect, the intrathoracic outcome as well as the contents and the hernial neck. In our case, the CT scan shows a right postero-basal diaphragmatic defect with intrathoracic protrusion of part of the hepatic dome through a narrow neck. Even if the picture remains asymptomatic as was the case in our patient, the management of asymptomatic HB must be systematic given the severity of its complications [2]; and will be based on videothoracoscopy and laparoscopy. On the occasion of respiratory and/or digestive complications, a thoracotomy and/or laparotomy seem rather to indicate to reduce the hernial contents with probable resection in the event of ischemic complications.

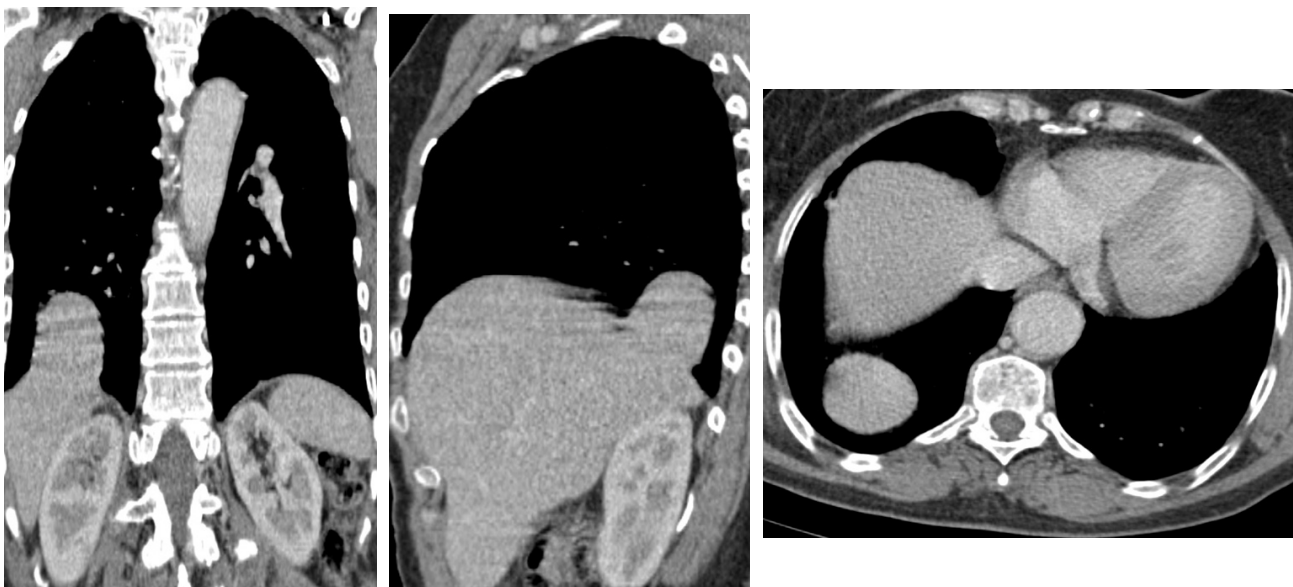


Figure 1: Thoracic CT coronal slice (A), sagittal slice (B) and axial slice showing a right postero-basal diaphragmatic defect with intrathoracic protrusion of part of the hepatic dome through a narrow neck.

Discussion

Embryologically, Bochdalek's foramen, commonly known as Bochdalek's hernia, is a defect of the closure of the posterior region of the diaphragmatic muscle of the fetus, originated from the transverse septum measuring 2 to 3 cm, this embryonic development is bilateral in form backward anteriorly and more frequent on the left in virons of 70%, followed associated with other malformations at the level of the central nervous system or heart, insufficiency of lung development or chromosomal abnormalities [3,4]. The symptoms of Bochdalek's hernia can vary depending on the severity of the condition. Affected newborns may experience severe breathing difficulties, rapid breathing, rapid heartbeat, cyanosis (blue discoloration of the skin), difficulty feeding, and poor growth [5]. The discovery of an asymptomatic Bochdalek hernia in adults is often a serendipitous incident, as many people can live with this condition without ever experiencing severe symptoms. In such cases, the conclusion usually depends on several factors: Medical evaluation: The doctor should then recommend imaging tests such as chest X-rays, ultrasounds, or chest CT scans to confirm the diagnosis and assess the severity of the hernia. Monitoring: In many cases, an asymptomatic Bochdalek hernia can be monitored closely without the need for immediate treatment. Regular check-ups and medical follow-ups may be recommended to ensure that there is no development of symptoms or complications. Lifestyle: People with asymptomatic Bochdalek hernia may be encouraged to adopt a healthy lifestyle, including avoiding activities that could worsen the condition, such as lifting heavy objects or participating in high-physical sports. Specialist consultations: In some cases, it may be recommended to consult specialists, such as thoracic surgeons or gastroenterologists, for additional advice on managing the condition. Patient education: It is important to educate the patient

about their condition, including signs and symptoms to look out for that could indicate a worsening of the hernia. Patients should be aware of what to do if they experience new or worrisome symptoms.

Conclusion

The discovery of an asymptomatic Bochdalek's hernia in adults requires a thorough medical evaluation to determine the best management plan. While many cases can be monitored without immediate treatment, open and ongoing communication with healthcare professionals is essential to ensure proper management of the condition.

References

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