Symptomatic Right Sided Bochdalek Hernia in a 91-year old female. Case Report.

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INTRODUCTION

Bochdalek hernia (BH) is a type of congenital diaphragmatic hernia that occurs due to a defect in the posterior attachment of the diaphragm when there is a failure of pleuroperitoneal membrane closure in utero, associated with severe pulmonary complications during perinatal life. The prevalence of BH in adults is only 0.17%, of these, 20% are right-sided. We present a case of right sided BH in an adult.

CASE REPORT

A 91-year old female with a past medical history of hypertension, coronary artery disease, ulcerative colitis, laparoscopic cholecystectomy, colostomy and parastomal hernia with repair, presented to the emergency room with the chief complaint of intermittent epigastric abdominal pain that radiates to the back, nausea, and early satiety for a one week duration. A CT scan of the abdomen without contrast showed a non-complicated right-sided BH containing fat. As the patient was considered a poor candidate for surgery, the patient received conservative treatment.

DISCUSSION

A Bochdalek hernia is a rare type of congenital diaphragmatic hernia that occurs due to failure of the pleuroperitoneal membrane closure in utero. There are less than 150 reported cases of adult BH. Nowadays, the term "congenital diaphragmatic hernia" is preferred for hernias presenting in the neonatal period, as a result of large central diaphragmatic defects, which allows the protrusion of abdominal viscera into the thoracic cavity.

DISCUSSION

The term "Bochdalek hernia" is preferred for localized herniations through small diaphragmatic defects, occurring later in life without obvious symptoms. Although the formation of BH occurs in-utero, it may only become evident once it causes clinical symptoms in adulthood and is often revealed after trauma or during laparoscopic surgery, which raises intraabdominal pressure. Our patient had a prior history of multiple abdominal surgeries, which may have aided in revealing an underlying BH defect.

Adult BH is reported with an incidence of 0.17% with only 58 cases of right sided Bochdalek hernias described. Most of these cases are asymptomatic but the most common symptoms are abdominal pain, dyspnea, postprandial fullness, nausea, or vomiting.



Figure 1: Lateral CT Chest with evidence of diaphragmatic hernia in the posterior 1/3.

REFERENCES

- 1- Adame, I. S., Chávez, A. M. G., Bardales, B. D. M. L. V., & Hernández, L. R. J. (2021). Fatal Outcome in a Right Bochdalek Hernia with Renal Ectopia Diagnosed in Adulthood. Open Journal of Thoracic Surgery, 11(04), 89–95. https://doi.org/10.4236/ojts.2021.11401
- 2- Al-Dugdugi, M., Alhazmi, A., Khaliel, A., & Perez, L. (2017, May 17). Bochdalek Hernia in an Adult with Upper Gastrointestinal Bleeding. Case Reports in Gastroenterology, 11(2), 284–292. https://doi.org/10.1159/000462968
- 3- Brown, S. R., Horton, J. D., Trivette, E., Hofmann, L. J., & Johnson, J. M. (2010, July 8). Bochdalek hernia in the adult: demographics, presentation, and surgical management. Hernia, 15(1), 23–30. https://doi.org/10.1007/s10029-010-0699-3
- 4- David Rocha Paiva, Daniela Casanova, Helio Martins, Margarida Cerqueira, Mariana Formigo, Olinda Miranda, & Jorge Cotter. (2020, April 17). A Rare Cause of Dyspnoea: Right-sided Bochdalek Hernia in an Adult. European Journal of Case Reports in Internal Medicine, LATEST ONLINE. https://doi.org/10.12890/2020_001531
- 5- Hamid, K. S., Rai, S. S., & Rodriguez, J. A. (2010). Symptomatic Bochdalek Hernia in an Adult. JSLS: Journal of the Society of Laparoendoscopic Surgeons, 14(2), 279–281. https://doi.org/10.4293/108680810x12785289144719
- 6- Katsenos, S., Kokkonouzis, I., Lachanis, S., & Psathakis, K. (2008). Right-sided Bochdalek Hernia Presenting as a Solitary Pulmonary Nodule. Radiology Case Reports, 3(2), 114. https://doi.org/10.2484/rcr.v3i2.114
- 7- Natroshvili, T., Faraj, D., Janssen, E., Goor, H. V., Hartman, M., Buyne, O. R., & Natroshvili, T. (2020, March 25). Right-Sided Bochdalek Hernia with Cecum Perforation. Surgical Case Reports, 1–5. https://doi.org/10.31487/j.scr.2020.03.04
- 8- Ramspott, J. P., Regenbogen, S., Jäger, T., Lechner, M., Mayer, F., Gabersek, A., Emmanuel, K., & Schredl, P. (2021, November 19). Case Report: Adult Right-Sided Bochdalek Hernia Complicated by Intrathoracic Bowel Perforation. Frontiers in Surgery, 8. https://doi.org/10.3389/fsurg.2021.755279
- 9- Yamamoto, A., & Iwata, T. (2019, May 17). Right-sided Bochdalek hernia containing retroperitoneal fat in the elderly: report of a case. Surgical Case Reports, 5(1). https://doi.org/10.1186/s40792-019-0637-2

