Primary Pulmonary Choriocarcinoma Presenting with a Hemothorax

Hyun-Joo Seol, MD,* Ju-Han Lee, MD,† Ki Yeol Lee, MD,‡ Je-Hyeong Kim, MD,§ Nak-Woo Lee, MD,∥ and Hyung-Joo Park, MD¶

CASE REPORT

A 19-year-old woman was admitted to the emergency room for chest pain that had developed suddenly 2 hours before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field. Her last menstrual period had occurred 5 months before admission. She was hemodynamically stable and had decreased breath sounds, particularly in the right lower lung field.

DISCUSSION

Primary pulmonary choriocarcinoma is extremely rare, with only 23 cases reported in the literature. To our knowledge, a primary pulmonary choriocarcinoma presenting with a hemothorax has never been reported. Although the origin of primary pulmonary choriocarcinomas is controversial, several theories about the pathogenesis of this tumor have been proposed, such as differentiation of the pulmonary epithelium into trophoblastic structures or metastatic emboli of gestational trophoblastic tissue undergoing spontaneous regression. In our case, we excluded metastatic gestational choriocarcinoma because the pelviscopy revealed grossly normal pelvic organs and endometrial tissues. The present case is an unusual type of primary pulmonary choriocarcinoma that manifested as a hemothorax. Although it was originally erroneously diagnosed as an ectopic pregnancy, the patient
FIGURE 2.  
A, The cut surface shows a circumscribed hemorrhagic mass involving the pleura.  
B, Low-magnification microscopy of the choriocarcinoma shows a sheet-like proliferation of atypical cytotrophoblasts (arrow) and scattered syncytiotrophoblasts (arrow head) with hemorrhage (hematoxylin-eosin, original magnification ×100).  
C, Tumor cells stain strongly immune-positive for β-hCG (original magnification ×100).  
D, High magnification of the tumor cells shows marked nuclear and cellular atypia and increased mitotic activity (arrow) (hematoxylin-eosin, original magnification ×400).

FIGURE 1.  
A, A chest radiograph showing a large right pleural effusion.  
B, Transvaginal ultrasound reveals no specific findings in the pelvic organs.  
C, A contrast-enhanced chest computed tomography (CT) showing a large pleural effusion and a thin-walled cystic mass in the right lower lobe (arrow).  
D, After drainage of the hemothorax, a cystic mass is still visible on CT (arrow).
was treated successfully by surgical resection and combination chemotherapy.

REFERENCES