



Ruptured Lung Hydatid Cyst in Late Pregnancy that Mimics Tension Hydropneumothorax

Hamileliğin Geç Döneminde Tansiyon Hidropnömotoraksı Taklit Eden Rüptüre Akciğer Kist Hidatiği

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Abstract

Respiratory failure and hemodynamic instability are responsible for up to 80% of the obstetric admissions to the intensive care unit. We report an unusual case of a multigravida with ruptured pulmonary hydatid cyst that mimics tension hydropneumothorax.

Key words: Hydatid cyst at pregnancy, tension hydro-pneumothorax, obstetric emergency.

Özet

Solunum yetmezliği ve hemodinamik anstabilite, obstetrik yoğun bakım yatışlarının %80'inden sorumludur. Biz burada çok nadir karşılaşılan multigravid hastada hamileliğin geç döneminde tansiyon hidro-pnömotoraksı taklit eden rüptüre akciğer kist hidatiği sunduk.

Anahtar Sözcükler: Hamilelikte hidatik kist, tansiyon hidropnömotoraksı, obstetrik acil.

Hydatid disease in pregnancy is a rare condition, with an incidence of 1/20,000 to 1/30,000 deliveries (1,2). In late pregnancy, it carries the risk of enlargement with subsequent rupture and anaphylactic shock (3). Respiratory failure and

hemodynamic instability are responsible for up to 80% of the obstetric admissions to the intensive care unit (4). We report an unusual case of a multigravida with ruptured pulmonary hydatid cyst that mimics tension hydropneumothorax.

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CASE

A 21-year-old patient with multigravida, at 34 weeks of gestation, presented with syncope, vomiting, and respiratory failure. She explained that the symptoms had been present for ten days. She had gone to some medical centers, but the doctors diagnosed her symptoms as being related to the last trimester of pregnancy. There was not any thoracic imaging up to now. The patient's physical examination revealed severe respiratory distress with a respiratory rate of 35 breaths/min, tachycardia of 160-183/min, fever of 38.0 °C, blood pressure of 90/60 mmHg, and no breath sounds at the left hemithorax. Oxygen saturation was 90% with a facemask at 10 L/min. The chest x-ray that was taken on presentation to the referring hospital revealed a high air-fluid level, which was surrounded by a thick membrane in the left hemithorax with the sliding of the trachea and heart to the right hemithorax, which mimics tension hydropneumothorax (Figure 1). Thoracentesis was carefully conducted to exclude hydropneumothorax, and neither fluid nor air was aspirated from the left hemithorax. A decision was made to proceed with a caesarian section, followed by left thoracotomy to save both the mother and the baby. Informed consent was obtained from patient. Following the caesarian section, a left thoracotomy was performed. A destroyed left lower lobe and huge ruptured hydatid cyst were detected. A left lower lobectomy was performed. The baby was sent to another hospital for admission to the pediatric intensive care unit. The mother was discharged from the hospital nine days after surgery without any complications.

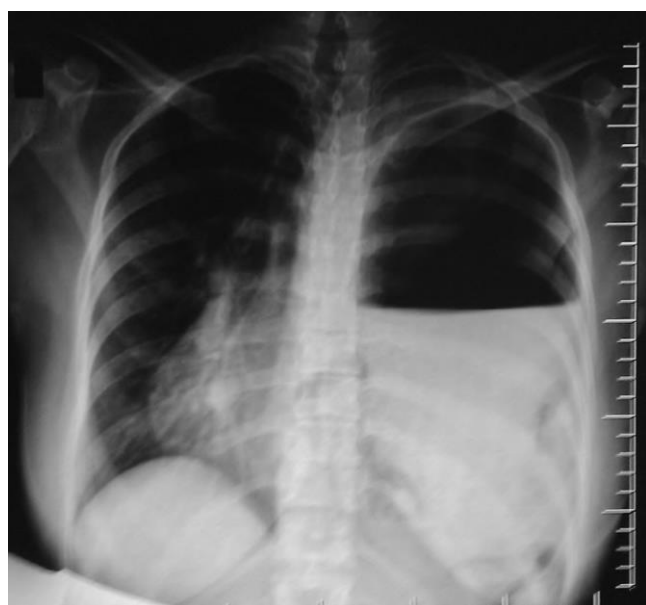


Figure 1: Ruptured cystic structure with right side mediastinal deviation

DISCUSSION

A hydatid cyst is a kind of parasitosis, which affects mostly liver and/or lungs. It can cause different symptoms or be found incidentally. Cough, hemoptysis, and chest pain are the most common symptoms of hydatid cyst of the lung (5). There are very few cases about pregnancy and coexistence with hydatid cyst in literature (1,2,5,7). In the current case, we determined a ruptured hydatid cyst of the lung in the late period of pregnancy with respiratory failure.

Cysts may rupture spontaneously or more commonly precipitated by a sudden rise in intrapulmonary pressure (6). It may follow an increase in intraabdominal pressure as in pregnancy (7).

Radiologically, an intact cyst typically presents as a round or oval homogenous density with sharp margins. In case of a ruptured cyst, the solid component may fall into the cavity (mass within a cavity) (8). The current case revealed a high air-fluid level in the left hemithorax with sliding of the trachea and heart to the right hemithorax. A solid component of the cyst was not seen on the chest X-ray and it could be confused with tension hydropneumothorax in emergency conditions.

Pregnancy and pulmonary hydatidosis occurring together are very rare and there is no consensus on standard approach (7). The researchers of the current study believe that definitive management of ruptured pulmonary hydatid cyst is surgery.

Ruptured pulmonary hydatid cyst should be considered in patients living in endemic areas with suggestive radiologic findings, especially during pregnancy. Doctors should be alert for the patients who live in endemic areas for hydatid cyst and receive a chest x-ray before planning pregnancy.

CONFLICTS OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

Concept - C.M.T., A.C.; Planning and Design - C.M.T., A.C.; Supervision - C.M.T., A.C.; Funding - C.M.T., A.C.; Materials - C.M.T., A.C.; Data Collection and/or Processing - C.M.T., A.C.; Analysis and/or Interpretation - C.M.T., A.C.; Literature Review - C.M.T., A.C.; Writing - C.M.T., A.C.; Critical Review - C.M.T., A.C.

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