

Multiple mediastinal hydatid cyst: a case report

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ÖZET

Multipl mediastinal hidatik kist: Olgu sunumu

Hidatik kist hastalığı, özellikle Ortadoęu ve Orta Asya olmak üzere birçok ülkede endemik olmaya devam etmektedir. Mediastinal hidatidoz çok nadir olup (tüm hidatik kist hastalıklı olguların %0.1'inden az) literatürde sadece anekdotal olarak bildirilmiştir. Bilgilerimize göre, şimdiye kadar multipl mediastinal hidatik hastalıklı sadece bir olgu bildirilmiştir. Biz multipl mediastinal hidatik hastalıklı ikinci olguyu sunuyoruz ve endemik ülkelerde multipl mediastinal kitlelerin ayırıcı tanısında düşünülmesini öneriyoruz.

Anahtar Kelimeler: Mediasten, kist, hidatik hastalık.

SUMMARY

Multiple mediastinal hydatid cyst: a case report

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Hydatid disease is a parasitic infection that is remains endemic in many countries, particularly the Middle East and Central Asia. Mediastinal hydatidosis is very rare (less than 0.1% of all hydatid disease cases) that have been only anecdotally in the literature. To the best of our knowledge only one case of multiple mediastineal hydatid cysts has been reported previously. We report the second cases of multiple mediastineal hydatid cysts and recommend that it can be considered in the differential diagnosis of multiple cystic mediastineal masses in endemic countries.

Key Words: Mediastinum, cyst, hydatid disease.

Hydatid disease, or echinococcosis, is a parasitic infection by the larvae of *Echinococcus granulosus* that has been known since the time of Hippocrates (1). It remains endemic in many countries, particularly the Middle East and Central Asia (2).

Mediastinal hydatidosis is very rare (less than 0.1% of all hydatid disease cases) that have been only anecdotally in the literature (3). To the best of our knowledge only one case of multiple mediastineal hydatid cyst has been reported previously by Rahimi-Rad et al. (3).

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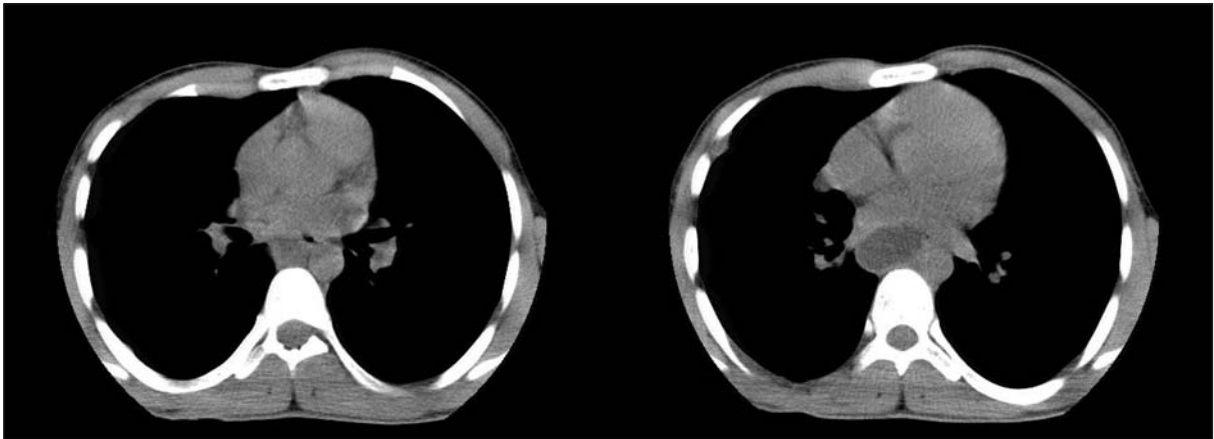


Figure 1. Axial CT scan show round, thin wall cystic mass in posterior mediastinum adjacent to aorta and esophagus.

CASE REPORT

A 20-year-old man referred to our center with chief complaints of dyspnea, dysphagia and chest pain since six months. There was no history of any previous disease, but he frequently came into contact with sheep. There was no history of fever, trauma and sputum. Physical examination was normal.

Laboratory datas were normal. There was no eosinophilia. Serology for hydatid disease was negative. Anteroposterior chest X-ray showed mild cardiomegally and posterior mediastineal (retrocardiac) mass without calcification. Computed tomography (CT) without contrast revealed posterior mediastineal cystic masses without calcification adjacent to aorta and with compression on esophagus Figure 1, 2.

Multiple small cystic nodule adjacent to right sided heart border on pericardium were seen Figure 3.

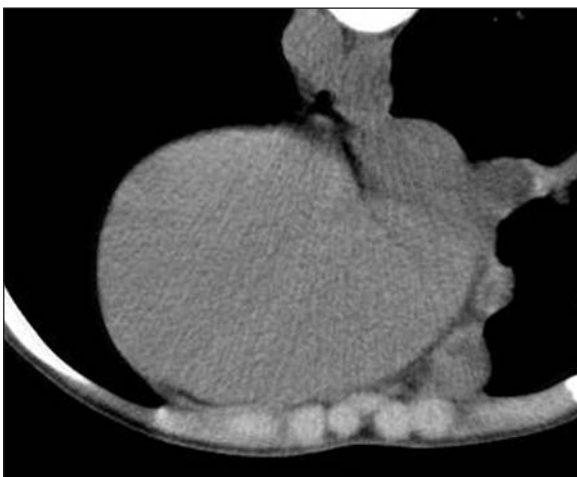


Figure 2. Axial magnified CT scan show three pericardial cystic nodule adjacent to right heart border.

Right posterolateral thoracotomy was performed. Multiple cystic masses were identified in the posterior mediastinum.

Cysts have adhesions to esophagus and aorta. After packing of the field with saline soaked long gauze aspiration of one of cysts showed clear fluid and diagnosis of hydatid cyst was done.

Total excision of mediastineal cysts and liver cyst were performed.

DISCUSSION

We presented a patient with multiple cystic masses in mediastinum. The differential diagnosis of cystic mediastineal masses in adults and children are neuroenteric, bronchogenic, pleuropericardial, thymic lymphangioma, as well as other rare entity (3).

Mediastinal hydatid cysts are extraordinarily rare condition (1). When cysts appear intrathoracically but in extrapulmonary locations, fatal complications, such as bronchial rupture, fistulas to the pleural and pericardial cavities, and severe bleeding may occur (4).

Two types of mediastinal involvement have been described: primary involvement and secondary to costal, pulmonary and vertebral hydatid disease.

Although hydatid cysts may be asymptomatic, but usually produce various symptoms due to compressive effect on surrounding vital structures such as dyspnea, retrosternal chest pain, cough, dysphasia, back pain, and superior vena cava syndrome (3,5). The most serious complications are invading to aorta and anaphylactic shock due to allergic reaction to cyst materials. Our patients chiefly experienced chest pain, dyspnea and dysphagia consequent to esophageal compression.

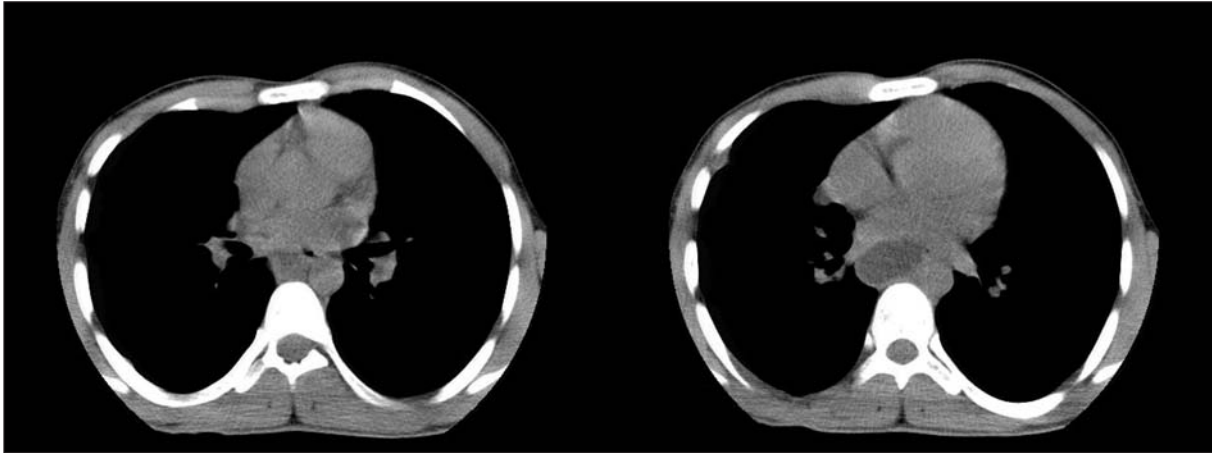


Figure 3. Axial CT scan show multicystic mass in posterior mediastinum adjacent to descending aorta and hepatic hydatid cyst in right lobe of liver.

Most of posterior mediastinal hydatid cysts are multivesicular and formation of daughter cysts is common vice versa of lung hydatid cyst (6).

Calcification has not been reported in mediastinal hydatid cyst and in the presence of calcification other mediastineal masses should be considered. It possible to establish satisfactory and reliable suspicion with the use of conventional radiography in concert with computed tomographic scanning in pulmonary hydatid cysts but conversely in the case of intrathoracic extrapulmonary cysts, preoperative diagnostic methods are not always reliable.

Many serologic testes are being proposed today. However, due to their low diagnostic value, variable sensitivity and specificity, these testes are not routinely performed in most studies (7).

Diagnosis can be reached with combined assessment of clinical, radiological, and historical and laboratory data.

Cystectomy and resection of the adjacent pericystic structures is the gold standard method for treatment hydatid cyst (3). When total excision of cyst is impossible because of the location of cyst and invasion to the vital structures, partial pericystectomy is the treatment of choice after the removal of germinative membrane.

To avoid recurrence, it is necessary to place patients on an anthelmintic medical regimen postoperatively.

In conclusion multiple hydatid cysts of the mediastinum are clinical entity that must be considered when caring for a patient with a multiple mediastinal mass in endemic regions. Because of surrounding vital structures the cyst should be treated without delay.

CONFLICT of INTEREST

None declared.

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