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Primary Chest Wall Hydatid Cyst

Göğüs Duvarının Primer Hidatik Kisti

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Abstract

Despite several important advances in the control of hydatid disease, this disease remains a major health problem in some countries. Primary hydatid disease of the chest wall is extremely rare. We report a case of a primary chest wall hydatid cyst in a 48 year- old man who had not been operated on before for hydatid disease. He was admitted to hospital with 5 months history of a gradually enlarging swelling on the left side. Patient was operated after physical and radiological examinations. The macroscopic apperance of the mass was hydatid cyst. Histological examination of surgical excised material confirmed the diagnosis. Chest wall hydatid disease should be considered in the differential diagnosis of chest wall mass especially in endemic areas. **Keywords:** chest wall mass, hydatid cyst, cystectomy

Özet

Hidatik kistin kontrolü ile ilgili önemli gelişmeler olmasına rağmen, bu hastalık halen bazı ülkelerde majör bir sağlık problemi olmaya devam etmektedir. Göğüs duvarında primer hidatik kist nadir rastlanılan bir durumdur. Biz burada 48 yaşında daha önce hidatik kist nedeniyle opere edilmemiş, primer göğüs duvarı hidatik kisti olan erkek hastayı sunuyoruz. Hasta son 5 ay içerisinde sol tarafında yavaşça büyümeye devam eden kitle ile hastaneye başvurdu. Fizik muayene ve radyolojik incelemelerin ardından hasta operasyona alındı. Kitlenin makroskobik görünümü hidatik kist ile uyumluydu. Eksize edilen materyalin histolojik değerlendirmesi tanıyı doğruladı. Özellikle endemik bölgelerde göğüs duvarı kitlelerinin ayrıcı tanısında hidatik kist olasılığı unutulmamalıdır. **Anahtar Sözcükler:** göğüs duvarı kitle, hidatik kist, kistektomi

Introduction

Despite several important advances in the control of hydatid disease, this disease remains a major health problem in some countries. It is endemic in Mediterranean countries, the Middle East, Far East, and South America (1). Hydatid disease of the chest wall is an uncommon finding, even in countries where echinococcosis is endemic. The disease can be seen in the musculoskeletal system in 1–4%, chest wall involvement constitutes only 6% of them (2). In patients who did not undergo surgery for hydatid disease before, primary chest wall hydatid cyst is extremely rare (3,4).

Case

A 48-year-old man was admitted to hospital with 5 months history of a gradually enlarging swelling on the left side. He had not been operated before for any disease. The patient's history was not got any significant event. Physical examination revealed about 12-13 cm fluctuating mass on the left posterolateral chest wall. Chest X-ray showed only soft tissue swelling on left side. On computed tomography, the lesion was localized inferior to posterolateral part of latissimus dorsi muscle and measured about 10 cm in diameter. Its content was similar to fluid density with marked edges soft tissue density. (Fig.1) At operation, the mass was incised and daughter cysts with clear fluid were found inside the cyst. The macroscopic apperance of the mass was hydatid cyst.(Fig.2-3) Cystic lesion was excised with its wall and surgical area was washed with hypertonic saline solution. Histological examination of surgical excised material confirmed the diagnosis. After surgery he was given treatment with albendazole for 6 months. There has not been any recurrence after the surgery up to now.

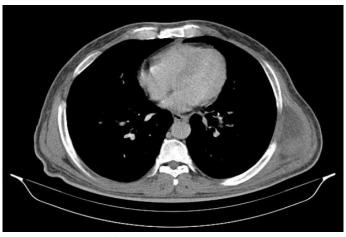


Figure 1. Tomographic apperance of mass



Figure 2. Mass at chest wall

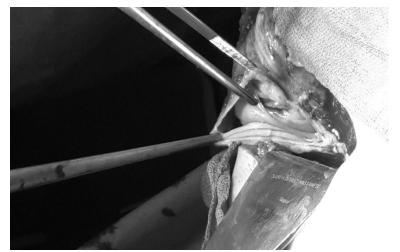


Figure 3. Hydatic cyst with membrane at chest wall

Discussion

Primary hydatid disease of the chest wall is an extremely rare condition even in countries where echinococcosis is endemic. Chest wall hydatosis may be seen after rupture of pulmonary hydatid cyst into the pleural space or thoracotomy (4). In our case, we did not observed hydatid disease in any part of the body and patient didn't get surgery before.

The serological tests including direct hemagglutination, latex agglutination, immunoelectrophoresis, skin tests and enzyme-linked immunosorbent assay are broadly unusual sites. Histopathological evaluation of the excised specimen and the fine needle aspiration cytology usually leads to the diagnosis. Puncture of the cyst may lead to an used to substantiate the diagnosis (5). However, because of chances of false positives and negatives, imaging modalities remain more sensitive than

serodiagnosis, especially with anaphylactic reaction due to spillage of hydatid fluid. (6-8) We did not make fine needle aspiration because of risk of spillage of cystic fluid. Currently, the most effective treatment for hydatid disease located in soft tissue is still surgery. The main purpose of surgery is to prevent complications such as compression of surrounding structures, infection, or cyst rupture. Total cystectomy with fibrous adventitia, which allows for the removal of all parasitic elements without spillage of the contents of the cyst, is curative treatment for soft tissue hydatidosis. Soft tissue cysts can be easily ruptured. Therefore, rupture of the cyst must be avoided to prevent recurrence.

In conclusion, the diagnosis of hydatidosis should be considered in asymptomatic swelling in chest wall when patients belong to endemic area.

Conflict of Interest: There is no conflict of interest.

References

- Gupta R, Mathur SR, Agarwala S, Kaushal S, Srivastav A. Primary soft tissue hydatidosis: aspiration cytological diagnosis in two cases. Diagn Cytopathol 2008;36(12):884-6.
- Findikcioğlu A, Kılıç D, Canpolat T, Hatipoğlu A Primary Hydatid Disease of the Chest Wall Ann Thorac Cardiovasc Surg 2007; 13: 203–205
- Karapınar K., Altınok D., Çetingök U., Düzgün C. Primary posterior chest wall echinococcosis. Int Surg 1999, 84: 89-90.
- Yılmaz Avcı B, Yıldırım M, Önen A. Primary hydatid disease of the chest wall: a case report. <u>Acta Chir Belg</u> 2005 Aug;105(4):420-1.
- 5. Aveu S, Unal O,Kotan C, Ozturk M, Ozen O. Submandibular and thyroid gland involvement of hydatid

cysts: a very rare association with percutaneous treatment. Diagn Interv Radiol 2010;16(3):251-4.

- Hilmani S, Bertal A, Sami A, Ouboukhlik A, El-Kamar A, El-Azhari A. Primary hydatid cyst of the neck. J Neuroradiol 2008;35:188-9.
- Iynen I, Sogut O, Guldur ME, Kose R, Kaya H, Bozkus F. Primary hydatid cyst: an unusual cause of a mass in the supraclavicular region of the neck. J Clin Med Res 2011; 3: 52-4.
- Mujtaba SS, Faridi N, Haroon S. Primary Hydatid Cyst of the Neck. Journal of the College of Physicians and Surgeons Pakistan 2013;Vol.23(11):811-812