

RENAL HYDATID DISEASE WITH HYDATIDURIA

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Key Words: Renal Hydatid disease, Hydatiduria

Anahtar Terimler: Böbrek kist hidatiği, Hidatiüri.

SUMMARY

Hydatid disease is caused by the larval form of *Taenia echinococcus* (*Echinococcus granulosus*) in humans, the most common sites being the liver and the lungs. Involvement of the kidneys is uncommon and can be asymptomatic for long periods. Renal hydatid disease has no pathognomonic signs except for hydatiduria. In this article a case of Renal hydatid disease with hydatiduria which was diagnosed, with the previous literatures were discussed and presented.

ÖZET

Hidatiüri ile seyreden Böbrek kist hidatiği.

Kist hidatik, insanlarda, *Taenia echinococcus* (*Echinococcus granulosus*)'un larval formları tarafından oluşturulan, özellikle karaciğer ve akciğerleri tutan bir enfestasyondur. Böbrek tutulumu çok nadir olup, uzun zaman asemptomatik seyredebilir. Böbrek kist hidatik hastalığının "hidatiüri" dışında patognomonik bulgusu mevcut değildir. Hidatiüri ile seyreden, kist hidatik olgusu tarafımızdan teşhis edilmiş olup, konu bundan önceki literatürlerin ışığı altında incelenip sunulmuştur.

INTRODUCTION

Echinococcosis is an infestation caused in humans by the larval form of *Taenia echinococcus* (*Echinococcus granulosus*), whose definitive host is the dog and whose intermediary host is the sheep. The viscera affected most often are the liver and the lungs. Renal involvement constitutes approximately only 3—4% of all cases. Hydatid cysts can be asymptomatic or give rise to pressure symptoms and dull flank pain, depending upon the location and size. renal form of the disease has no pathognomonic signs except for "hydatiduria" (1). This sign is diagnosed by location of scolices or single hooklets in the urinary sediment, for which. dark-field observation may be useful.

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CASE REPORT

A 36 year old-man was admitted with 8-year history of left flank pain, passing "membranes" and clothes through urine. Physical examination revealed no pathology. Urine analysis showed leucocyturia and haematuria and culture yielded no organisms. Intravenous urography (IVP) was performed and a mass located on upper pole of the left kidney; pushing collecting system was detected. Connection between the mass and caliceal structures was noted. Ultrasonography (US) and computed tomography (CT) showed a multiloculated cystic formation measuring 8.5x7.5x6.0 cm, located on upper pole left kidney. Calcification was present on posterior part of the cyst. Casoni skin test was negative. Left nephrectomy was undertaken with diagnosis of renal hydatid disease.



Fig. 1: Intravenous urogram showing hydatid cyst, the connection with caliceal structures in the left kidney.

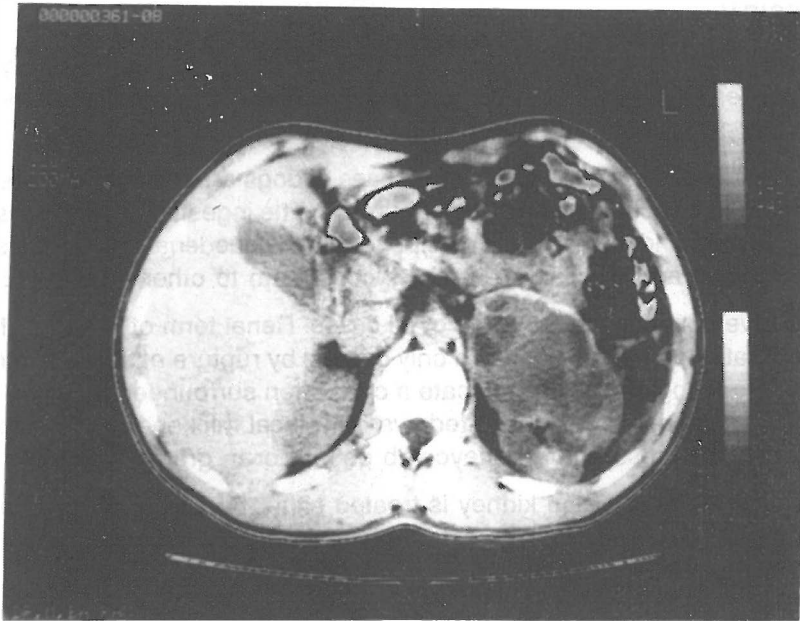


Fig. 2: Computed tomography showing multiloculated, cystic appearance of hydatid disease in the left kidney.

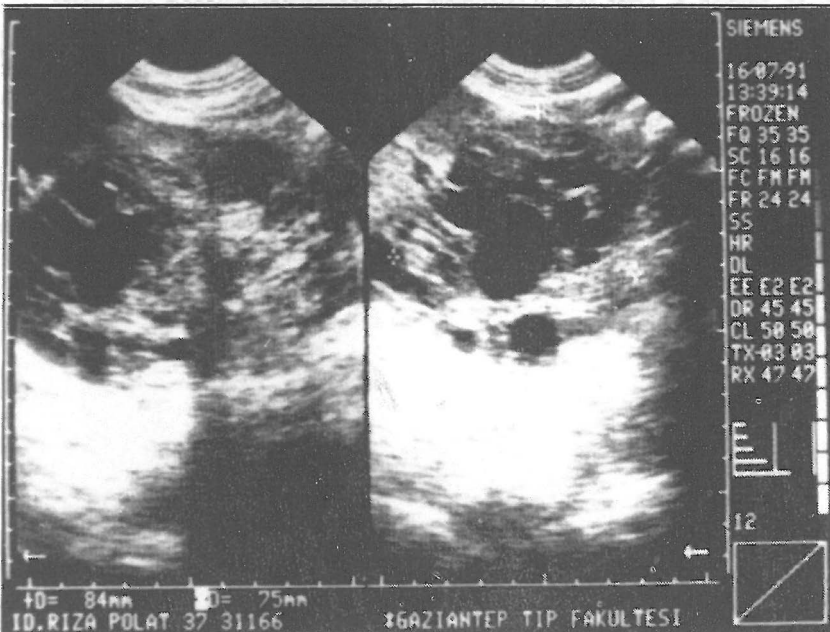


Fig. 3: Ultrasonography showing lobulated with focal thickenings appearance of hydatid disease in the left kidney.

DISCUSSION

Echinococcal disease continues to be endemic in sheep and cattle raising countries of mediterranean, including Turkey. The incidence of the disease in those countries is approximately 15-20 per 100,000.

The echinococcal eggs excreted in the faeces of dogs are acquired by intermediary hosts, which can be sheep, cattle or humans. The ingested hydatid eggs hatch in the duodenum and the hydatid larvae penetrate the duodenal and intestinal walls into the venules and are carried by the bloodstream to other organs (1-5).

Renal involvement constitutes 3-4% of all cases. Renal form of passing of grape skin like gelatinous material and it is only caused by rupture of the cyst into renal pelvis (1). Radiological studies indicate a cyst, often surrounded by thick, calcified rim. On US and CT, multiloculated cyst with focal thickened is revealed. Daughter cysts will present in a honeycomb pattern or in grape cluters (6).

Echinococcal disease of the kidney is treated either by partial or total nephrectomy according to the degree and extent of the cyst (7). We have performed total left nephrectomy for our case.

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