

A case of hydatid cyst presented with chronic weight loss

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Dear Editor,

Hydatid cyst is a common infectious disease in our country. There are two forms of hydatid cyst infection in human beings; *Echinococcus granulosus* ve *Echinococcus multilocularis*. *Echinococcus granulosus* is more common than *Echinococcus multilocularis*.

In children, cough, fever, chest pain, hemoptysis are the most common symptoms. Weight loss in our case is the most obvious symptom and it is presented because weight loss is not a common symptom in the literature. Weight loss commonly accompanies to infections in children and described as chronic if it lasts longer than 6 months (2).

The possible underlying conditions are chronic disease, malabsorption, inflammatory bowel disease, rheumatic diseases, malignant, metabolic and endocrine diseases and chronic psychosocial stress (1). 11-year-old boy was admitted to our clinic with complaints of fatigue, anorexia and weight loss. Medical history revealed a weight loss of 7-8 kg in one year. On physical examination; respiratory sounds were decreased. Complete blood count, erythrocyte sedimentation rate, CRP, liver and kidney function, urinalysis and urine cultures were found to be normal.

Chest X-ray revealed diffuse density increase in the middle and lower regions and hilar air bronchograms on the right lung (Figure 1). Also chest tomography revealed 2 giant cystic lesion occupying upper middle and lower zones of the right lung (Figure 2).

Compression of right atrium and vena cava inferior was detected. Serologic studies for hydatid cyst were positive and diagnosis of pulmonary hydatid cyst was confirmed. He was treated with albendazole (15 mg/kg/day) and scheduled for surgery. Weight loss commonly accompanies to infections in children and usually develops acutely. It is described as chronic if lasts longer than 6 months. Chronic weight loss is a clinical condition

that should be evaluated promptly. An underlying chronic disease, malabsorption, inflammatory bowel disease, rheumatic diseases, malignancy, endocrine disorders with increased metabolic demands and psychosocial stress may lead to chronic weight loss (1).

In accordance with the diagnostic approach, we ordered a chest X-ray for the patient who was admitted with chronic weight loss. We detected a lesion on patient's chest X-ray that had increased density and smooth boundary and also including air bronchograms (Figure 1).

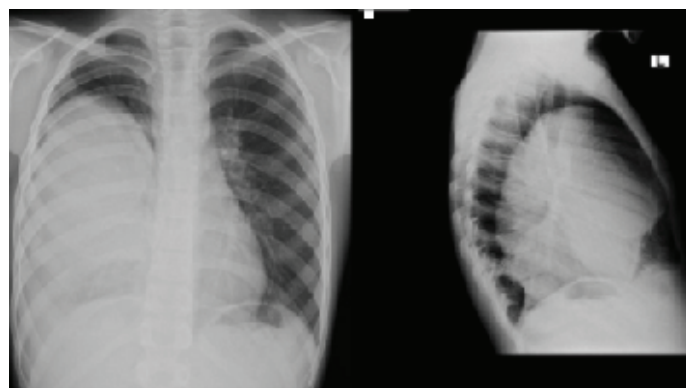


Figure 1. Chest X-Ray

For further examination, chest tomography (Figure 2) and some laboratory tests were done. The patient was diagnosed as hydatid cyst after the radiologic and laboratory evaluation. Since we have excluded the other possible underlying causes, we thought that the weight loss is linked to inflammation caused by *Echinococcus granulosus*. Echinococcosis is usually asymptomatic in children.

Most common symptoms in pulmonary involvement are cough, chest pain, dyspnea and hemoptysis. Some symptoms such as weakness, nausea, vomiting and chest deformities are rare (3).

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Figure 2. Chest Tomography

Because of immature immunity and increased lung elasticity, larger cysts may be seen in children when compared to adults (3,4). Pulmonary hydatid cyst involves the right lobe in 60% of cases, and liver cysts are seen in 20% of cases. A secondary bacterial infection, pneumonia or empyema may accompany to or develop after hydatid cyst. The cyst also can rupture and lead to pneumothorax, pleural effusion, chest pain, hemoptysis, vomiting and spasmodic cough (5,6)

There is no reported pediatric case in literature presenting

with only chronic weight loss symptom just like ours.

patient. Three adults and from Hungary a 4-year-old pediatric case by Bede O et al (7), were reported to have weight loss accompanying to hydatid cyst. But they had also symptoms such as cough, chest pain, pruritus and abdominal pain. As a result; chest X-ray evaluation in patients presenting with chronic weight loss should not be ignored. We want to emphasize that isolated weight loss might be the only clinical symptom of hydatid cyst.

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