



Medical Imagery

An unusual zoonotic parasitic disease causing a breast mass: Breast hydatid cyst



Case presentation

A 68-year-old woman presented with a right breast mass of 6-month duration, which was gradually increasing in size. Physical examination revealed a 10-cm mass in the upper outer quadrant of the right breast. This mass was firm, oval, non-tender, and free from the skin and underlying tissue. A medio-lateral mammogram revealed a homogeneous, dense, well-circumscribed lesion in the right breast (Figure 1). An axial computed tomography scan of the thorax showed a hypodense, well-defined mass with a capsular wall of 7 cm containing endogenous daughter cysts (Figure 2). Intraoperatively, an encapsulated breast mass with no adhesions was found. A surgical excision was performed. Histopathological



Figure 2. Axial thorax CT-scan showing a hypodense, well-defined mass with capsular wall of 7 cm containing endogenous daughter cysts.

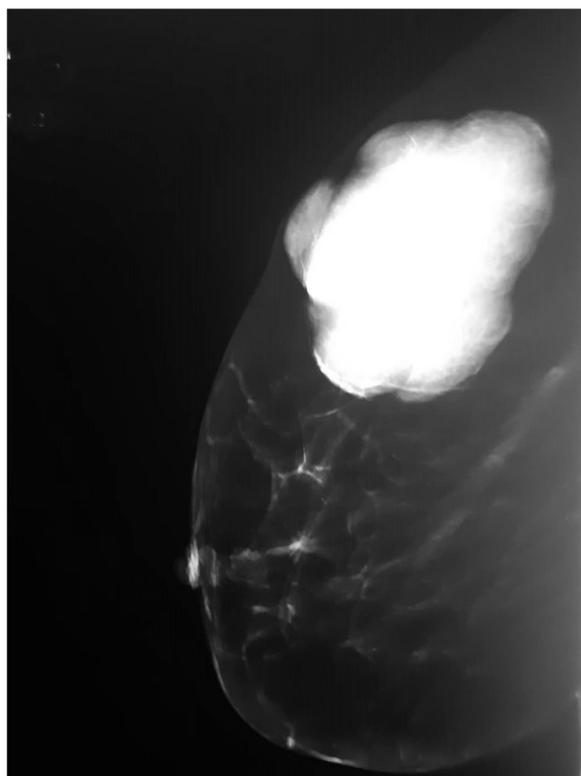


Figure 1. Medio-lateral mammogram showing a homogenous dense lesion in the right breast.

examination confirmed the diagnosis of breast echinococcosis. During postoperative follow-up, medical treatment with albendazole 10 mg/kg/day for 3 months was used. At the 5-year follow-up, no recurrence was detected.

Breast hydatid cyst is an uncommon cause of painless breast mass (Parooei et al., 2017). It is caused by *Echinococcus granulosus* (Dziri, 2001). Infection is transmitted when *Echinococcus* eggs, shed through the stool of the definitive host, are ingested by humans or other animals (Dziri, 2001). When the parasitic eggs escape the liver–lung barrier, they can cause a primary infestation anywhere, in particular in the breast. This infection can mimic a breast tumor. Imaging findings were important for preoperative diagnosis, revealing some specific signs like daughter cyst sign in this case (Chaouch et al., 2019).

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Ethical approval

Written informed consent was obtained from the patient for the publication of this case report and its accompanying images.

Conflict of interest

No conflict of interest to declare.

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