

Hydatid Cyst of the Breast - About a Case.

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Abstract: *Hydatid cyst of the breast is a benign condition caused by echinococcus granulosus. Breast hydatidosis is rare. It can be isolated or associated with other localizations, pulmonary or hepatic. The objective of our work is to note an exceptional localization of hydatid disease: the breast. We present here the case of a young woman of 32 years old admitted for the management of a breast nodule discovered during autopalpation, with anatomopathological examination in favour of a mammary hydatid cyst. She presented as an isolated breast swelling and the diagnosis was made by ultramammography. The treatment is surgical. Although breast echinococcosis is slow evolving and generally has a good prognosis, it requires early diagnosis and adequate and timely management to avoid the evolution towards complications of the hydatid cyst, which can have serious consequences. Prophylaxis remains the only way to eradicate this pathology.*

Keyword: breast - echinococcus granulosus -anatomopathological examination -Prophylaxis

Introduction:

Hydatid cyst of the breast is a benign condition caused by Echinococcus granulosus. Since hydatidosis is a ubiquitous disease, the breast can be affected like other organs [6]. The diagnosis of this disease is made by mammography-ultrasound. Certainty can only be obtained by anatomopathological examination [6]. The objective of our work is to note an exceptional localization of hydatid disease: the breast, and consequently to sensitize the practitioners (Doctors, surgeons, radiologists...) to think of this localization in spite of its rare character. We report in the present work, a case of primary hydatid cyst of the breast, which was diagnosed in the service of obstetrics gynecology I at the CHU Hassan II of FES.

Patient and observation:

Mrs. N.J. was 48 years old, single, with a history of lumpectomy of the right breast and a history of contact with dogs. In addition, there was no similar case in the family. She consulted for the management of a right breast nodule discovered on autopalpation 3 months previously. Clinical examination of the patient showed that the right breast was larger than the left breast. The nipple, areola and skin were normal in appearance. On palpation of the breasts, in the sitting and lying position, with the arms raised and then hanging down, a nodule was found in the right breast, about 2 cm long, well limited, mobile in relation to the two planes, and painless on mobilization. There was no nipple discharge when the breast was pressed. In addition, the examination did not reveal any local inflammatory signs. The lymph nodes were free. The left breast was without abnormalities. The rest of the clinical examination was unremarkable. In front of this clinical picture, several diagnoses had been evoked, namely: a breast tumor, a fibroadenoma, an abscess or a hydatid cyst of the breast. A mammogram was performed and showed a well-limited, homogeneous, watery opacity of the right QSI, without microcalcifications. A breast ultrasound completed the work-up and showed a right cystic lesion measuring 25 mm, with a thickened wall (3 mm), with local membrane detachment and daughter vesicles. The left breast was unremarkable. The blood workup (CBC, CRP...) was normal. Hydatid serology, performed by both Elisa techniques and indirect hemagglutination, was negative in both cases. As part of a work-up to look for other localizations, a chest X-ray and an abdominal ultrasound were performed, and had not shown any other associated localizations. At the end of these examinations, we retained the diagnosis of hydatid cyst of the right breast as the most probable, in view of the clinical symptomatology (painless nodule, well limited, mobile, renitent, without local inflammatory signs), the epidemiological context (notion of contact with dogs) and the data of the mammography coupled with the ultrasound. However, another etiology could not be excluded, given the rarity of the location of the hydatid cyst in the breast.

A surgical treatment was retained. A preoperative workup was performed (CBC, Ionogram, ECG, chest X-ray) and was normal. The operation was performed under general anesthesia. The patient was placed in dorsal decubitus position. The surgical approach was performed through a peri-areolar incision. Exploration revealed a cystic nodule about 2 cm long, pushing back the surrounding tissue without invading it (Figure 1). It was then decided to perform a total cystectomy, followed by a remodeling of the right breast filling the residual cavity and a plane-by-plane overjet closure. The postoperative course was simple. Anatomopathological examination of the surgical specimen was performed and confirmed the hydatid nature of the cyst. The patient was put on Albendazole (Zentel*) for a period of six months under monthly control of the liver check-up, NFS... She is followed regularly every three months during these first two years.



Figure 1: Intraoperative view of the primary hydatid cyst of the breast

Discussion:

In Morocco, hydatidosis poses a major public health problem and causes enormous economic losses. Its surgical incidence in 2008 was 5.2 per 100,000 inhabitants. Hydatidosis is present throughout Morocco, with an uneven distribution from one region to another. Three regions (Meknes-Tafilalt, Chaouia-Ouardigha and Doukala-Abda) have the highest surgical incidences in the kingdom, with a clear predominance of females. Hydatid cysts of the breast mainly affect women aged between 30 and 50 years. Hydatid disease mainly affects the liver (70%) and the lung (20%)[1]. 1] Other sites account for 10-20% of cases. Mammary hydatidosis is often discovered by chance during a clinical examination, due to the long clinical latency period which varies from 2 months to 20 years [2]. In our case, the patient presented a nodule of the right breast, well limited, painless, mobile in relation to both planes, renitent, without local inflammatory signs and without adenopathy and without any other associated localization. The diagnosis of hydatid cyst of the breast is made on the basis of clinical symptoms and the epidemiological context (notion of contact with dogs or history of echinococcosis) aided by mammography and ultrasound [3-4-5]. MRI may be necessary to differentiate cysts from malignant tumors. Fine needle aspiration yields a rockwater-like fluid that is pathognomic of mammary hydatidosis. If it is done, it must always be completed by a surgical removal of the puncture site. Hydatid serology is of great diagnostic value. The curative treatment of mammary hydatidosis is surgical, it consists in a cystectomy en bloc, without breaking it. In the case of its invasion, it is necessary to soak the surgical field with hypertonic serum or with hydrogen peroxide. The evolution is favorable if the surgical removal is complete, such is the case of our observation.

Conclusion :

Mammary hydatidosis is a benign disease with a good prognosis. The onset is progressive, taking the form of a swelling of the breast, painless, without accompanying signs, progressively increasing in volume and of obscure etiopathogeny. The diagnosis must be made in the presence of any cystic breast mass. Ultrasound/mammography is used to make the diagnosis. The hydatid extension work-up must be performed to differentiate between a primary and secondary location of echinococcosis. We insist on prophylactic measures, which remain the only guarantee to eradicate this pathology.

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