Journal of african clinical cases and reviews / Journal africain des cas cliniques et revues

www.jaccrafrica.com ISSN 1859-5138 Open access

Clinical case

Hamartoma of the breast. A rare tumour in a 14-year-old

Hamartome du sein. Une tumeur rare chez une fille de 14 ans

Y Dianessy*, M Samaké[1], BS Dembélé[1], A Guiré[1], RR Yusimi[2], J Koné[3], A Saye[4], M Sissoko[5], S Konaré[6], BT Dembélé[7], B Coulibaly[8]

Résumé

L'hamartome du sein est une lésion bénigne du sein très rare avec une quantité variable de tissu adipeux, fibreux et glandulaire.

Il s'agit d'une patiente adolescente de 14 ans avec un antécédant d'une ménarche précoce (11 ans) porteur d'une masse mammaire droit de six (6) mois d'évolution, accompagné d'un picotement et un étirement de la peau, sans écoulement mammaire ni adénopathie axillaire.

La mammographie et l'échographie ont permis de poser le diagnostic d'un hamartome du sein.

Elle avait reçu un traitement traditionnel a base de coction des feuilles d'arbres sans succès.

Après avoir eu le consentement de la mère de la patiente, nous avons décidé de faire l'exérèse chirurgicale sous anesthésie générale le 19 Juillet 2023. La pièce opératoire qui pesait 243g était envoyée pour examen anatomopathologique qui a confirmé le diagnostic d'hamartome du sein. Les suites opératoires étaient simples, et aucune récidive n'est constatée jusqu'à ce jour.

Mots-clés : hamartome, sein, tumeur, rare.

Abstract

Breast hamartoma is a very rare benign lesion of the breast with a variable amount of adipose, fibrous and glandular tissue.

This is a 14-year-old adolescent patient with a history of early menarche (11 years) with a right breast mass of six (6) months of evolution, accompanied by tingling and stretching of the skin, without breast discharge or axillary lymphadenopathy.

Mammography and ultrasound were used to diagnose breast hamartoma.

She had received a traditional treatment based on the coction of tree leaves without success.

After having the consent of the patient's mother, we decided to do the surgical excision under general anesthesia on July 19, 2023. The surgical specimen, which weighed 243g, was sent for histopathological examination, which confirmed the diagnosis of breast

hamartoma. The postoperative period was simple, and no recurrence has been observed to date.
Keywords: hamartoma, breast, tumor, rare.

Introduction

Hamartome or fibroadenolipoma is a rare benign tumor of the breast, first described in 1971 by Arrigoni et al. It is frequently seen in perimenopause, and evoked in the presence of a mass that gradually increases in volume and does not differ in texture from the surrounding breast tissue. It can deform the breast if it is bulky.[1]

Any breast mass requires questioning, a thorough physical examination, and imaging such as ultrasound-mammography. Our observation relates the case of a 14-year-old girl with a history of early menarche seen in consultation on July 10, 2023 for right breast swelling of several months of evolution (6 months according to the patient). The breast had no pain at first, but that over time began to be bothersome with a tingling and stretching of the skin. A check-up including a breast ultrasound and a mammogram had been performed.

The patient underwent surgery for hamartoma of the right breast on July 19, 2023.

The surgical specimen, which weighed 243g, was sent for histopathological examination, which confirmed the same diagnosis. The post-operative period was simple.

Clinical case

We report the case of a 14-year-old girl with no medical-surgical history, early menarche (11 years). The onset of symptoms was six (6) months ago, marked by the appearance of a small lump in the right breast that was painless at first, which gradually increased in size until it caused a tingling and stretching of the breast skin.

No breast discharge, no weight loss, no cough or fever.

The girl's mother had consulted a traditional therapist who instituted an ointment made from the coction of tree leaves. The treatment lasted 3 months without success.

Faced with the increase in breast volume and the appearance of pain, we were consulted for better management.

Physical Examination:

General: The conjunctiva were well colored. Axillary temperature: 36.2 ºC, Weight: 43kg, Body mass index (BMI): 19.3kg/m2/sc

Inspection: The right breast was larger than the left breast, there was no orange peel appearance.

Palpation: A large mass was palpated taking all the frames of the right breast, not adhered to the deep plane. No homo and contralateral axillary lymphadenopathy. No discharge due to digitopressure of the nipples.

The left breast was normal in appearance.

Examination of the cardiorespiratory system was unremarkable.

Additional examinations:

Breast ultrasound and combined mammography: large right breast mass in favor of a Hamartome (BIRADS 3)

The preoperative assessment carried out was unremarkable. The patient was scheduled and operated on under general anesthesia on July 19, 2023.

A supraareolar arciform incision was made. Monobloc excision was easy with insignificant bleeding. The surgical specimen weighed 243g, 12cm long and 8cm wide. A Redon drain is removed the day after the operation.

The postoperative period was simple, and no recurrence has been observed to date.

Histopathological examination of the specimen showed a combination of adipose tissue, fibrous tissue and glandular elements, with nodular formations within a fibrous stroma that surrounds the mass confirming the diagnosis of hamartoma.

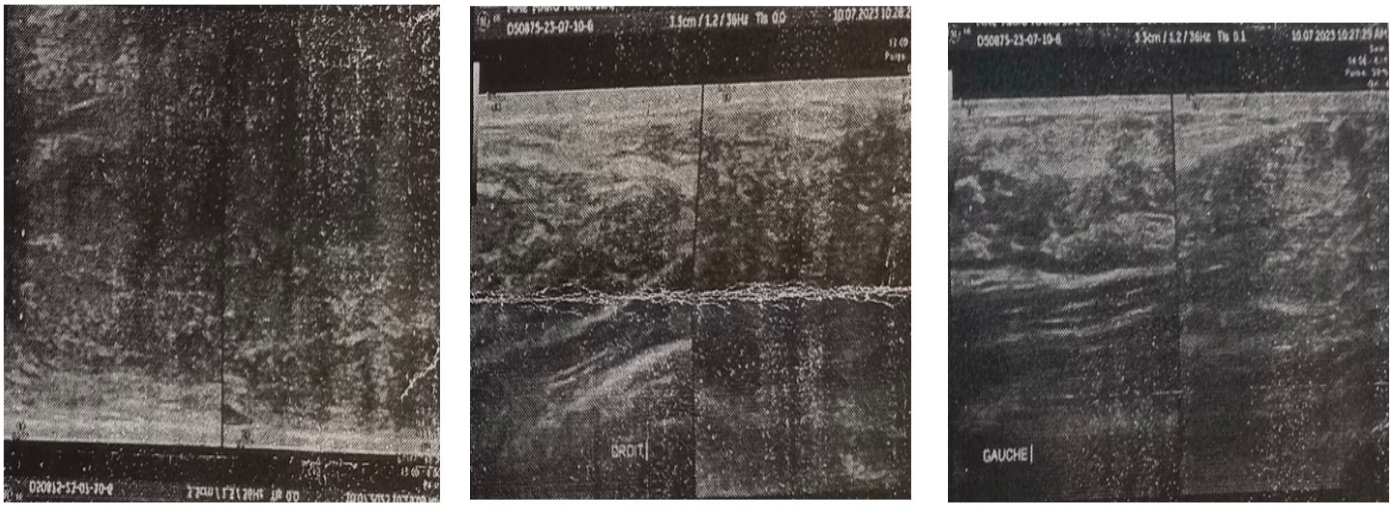

Figure I: Ultrasound Appearance of Breast Hamartoma

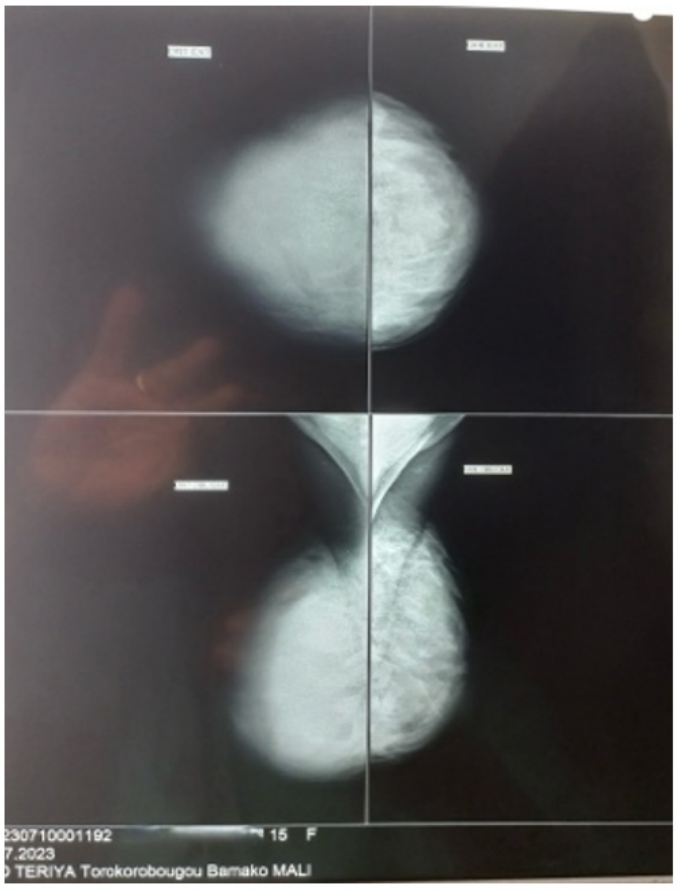

Figure II: Mammographic image of hamartoma

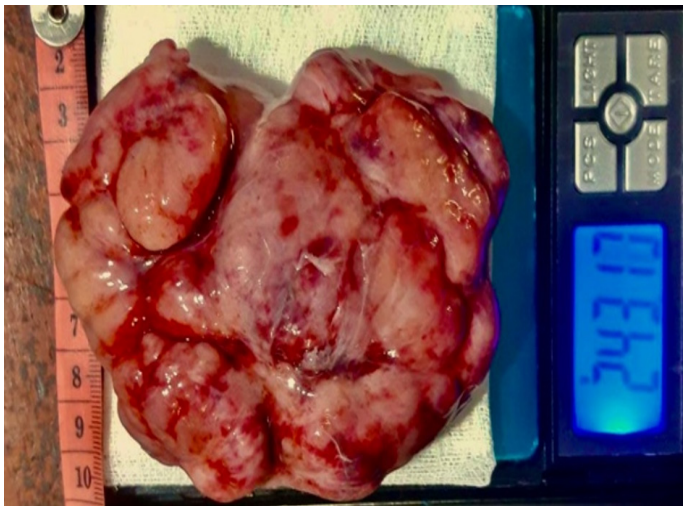

Figure III: 243g hamartoma piece

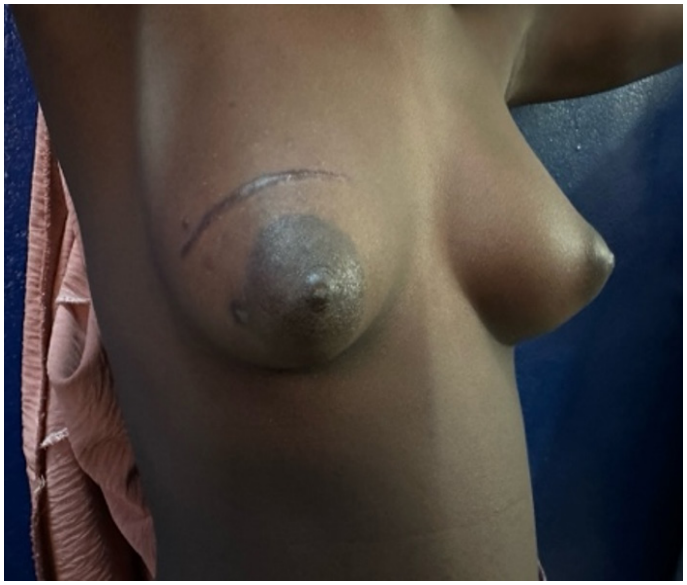

Figure IV: Postoperative breast appearance J21

Discussion

Hamartoma is a rare tumor-like lesion with an estimated frequency of 0.7% of benign breast lesions in women. It is often misunderstood and difficult to diagnose histologically due to the lack of specific signs [2].

Benign breast pathologies are a risk factor for breast cancer where the risk is increased 3 times more than in women without a history of benign pathology [3].

It is a rare lesion that affects the breast at any age from puberty onwards [4]. According to Feder et al, the majority of these lesions are seen in women over 35 years of age [5].

Only one case of breast hamartoma in a male has been reported in the literature

[6].

The mean age of patients was 34 years, with age extremes ranging from 16 to 59 years.

In 8 cases (27%), the age was less than 25 years [7].

The appearance of a breast hamartoma in our 14-year-old patient attracted a lot of attention.

The mean lesion size in S. Oueslati et al was 5 cm with extremes ranging from 23 mm to 15 cm [7].

Clinically, although hamartoma is usually asymptomatic, it may manifest as a tissue mass that is sometimes firm and mobile in consistency [8–10].

In addition to an asymmetry of the breasts, our patient presented with a hard, superficially mobile mass with tingling and stretching of the breast skin. There was no orange peel appearance or nipple retraction.

Mammography

It requires rigorous radiological technique, and a radiologist trained in reading mammograms. It is currently the paraclinical examination of choice in diagnosis by the quality of the images provided, gives information on the appearance of tumor opacity, its contours, skin signs, and detects occult cancers. It does not provide information about the solid or liquid nature of the tumour. Its limitations are represented by situations such as dense breasts.[11]

In most cases, the diagnosis of this abnormality is made on a mammogram. The hamartoma, with intermediate adipose content, has a mammographic appearance

A characteristic consisting of a rounded or oval, well-defined mass, sometimes surrounded by a hyperdense border corresponding to a pseudo-capsule [12]. The lesion includes glandular lobules arranged within the fat component achieving a "salami slice" appearance [13].

The diagnosis of hamartoma is mammography in the presence of a well-limited mass with partially fatty content, sometimes with calcifications giving a "breast within the breast" or "sausage-sliced" appearance [14].

Breast ultrasound

Ultrasound, as is the case in our observation, suggests the diagnosis in the presence of encapsulated breast tissue.

It is a very effective diagnostic method provided that the examination methodology is rigorous, that suitable equipment is used; In addition, it is an examination that is operator-dependent. It is therefore very suitable for the exploration of dense breasts and for the monitoring of benign mastopathies [11].

In ultrasound, the hamartoma is usually well limited with displacement of neighboring structures. The lesion may have either a heterogeneous appearance composed of hypoechoic fat crossed by irregular, hyperechoic bands or lines, or a homogeneous hypoechoic appearance. A complete or partial posterior shadow cone may be seen.[15]

Macroscopic examination shows a well-defined lesion with smooth contours [16].

The two combined examinations (ultrasound-mammography) performed on our patient revealed a voluminous blurred opacity with no break in the glandular architecture, nor a focus of pathological microcalcifications. This well-circumscribed hypoechoic tissue mass takes up almost the entire right breast. This coincides with the appearance of a hamartoma (BIRADS 3).

As was seen in most of our cases, the patient and her

family had resorted to a traditional treatment based on tree leaf coction but without success.

Informed consent had been reached with the patient's mother to proceed with a surgical excision.

After the excision, our patient's surgical specimen weighed 243g on an electronic scale, 12cm long and 8cm wide.

The postoperative course was favourable, the suction drain was removed on D2 and the patient was discharged on postoperative D4.

On histological examination, the characteristic appearance is that of an association of fatty tissue with normal glandular tissue forming nodular within a fibrous stroma that surrounds the mass and insinuates itself between the lobules [17, 18, 19, 20].

In the work of S. Oueslati et al in one case, the hamartoma was contiguous to a malignant lesion such as invasive ductal carcinoma that it partially masked on the mammogram. In 1 case, mammography revealed the presence of microcalcifications suspicious of malignancy on a large hamartoma. In 4 cases, mammography revealed the presence of other associated lesions suggestive of fibroadenomas in the same breast in 2 cases and in the contralateral breast in 2 cases [7].

Our case had no other associated breast pathology.

Conclusion

Although the diagnosis of breast hamartoma is extremely rare before the age of 15, the presence of a large mass in the breasts of these patients should be a suggestive of this diagnosis.

The impact of this entity is underestimated due to the lack of specific diagnostic criteria.

A clinico-radiological and histopathological confrontation is most often necessary. Treatment is based on surgery.

His prognosis is generally good.

***Correspondence**

Dianessy Yély .

dianessyyely@gmail.com

Available online : April 30, 2024

1 : Department of General Surgery, District Hospital of Commune IV of Bamako
2 : Obstetrics and Gynecology Department of the LATINO Medical Clinic
3 : Anesthesia-Intensive Care Unit, Faculty of Medicine and Odontostomatology (FMOS). Mali
4 : Obstetrics and Gynaecology Department, District Hospital of Commune IV of Bamako
5 : Surgery Department A, Point G University Hospital in Bamako
6 : Nephrology Department, District Hospital of Commune IV of Bamako
7 : Department of General Surgery, Gabriel Touré University Hospital in Bamako
8 : Anatomical Pathology Department, Point G University Hospital.

Conflict of interest : None

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To cite this article :

Y Dianessy, M Samaké, BS Dembélé, A Guiré, RR Yusimi, J Koné et al. Hamartoma of the breast. A rare tumour in a 14-year-old. Jaccr Africa 2024; 8(2): 246-251