

# **Supernumerary axillary breast ipsilateral to mastectomy for triple-negative breast carcinoma: what to do? Regarding a case report**

**Dr. imane lahlali<sup>1</sup>, Dr. edith tatiana<sup>2</sup>, Prof. Dr. hanan el kacemi<sup>3</sup>,  
Prof. Dr. tayeb kebdani<sup>4</sup>, Prof. Dr. khalid hassouni<sup>5</sup>**

<sup>1,2,3,4,5</sup>Department of Radiotherapy, National Institute of Oncology  
INO

## **Introduction**

Supernumerary breasts are persistent mammary glandular tissue along the lactation line, which extends from the armpit to the groin fold [1]. Diagnosis remains difficult in the absence of a nipple, which explains why this anomaly is often confused with lipomas and axillary lymphadenopathy.

## **Observation**

We report the case of an 87-year-old female patient, G11P10, with no significant medical history, admitted to the radiotherapy department for further treatment of triple-negative invasive ductal carcinoma of the right breast.

The initial clinical examination revealed a mobile nodule in the right breast measuring 4 cm at the junction of the right outer quadrants with two bilateral axillary masses (Figures 1-2).



(Figure 1)

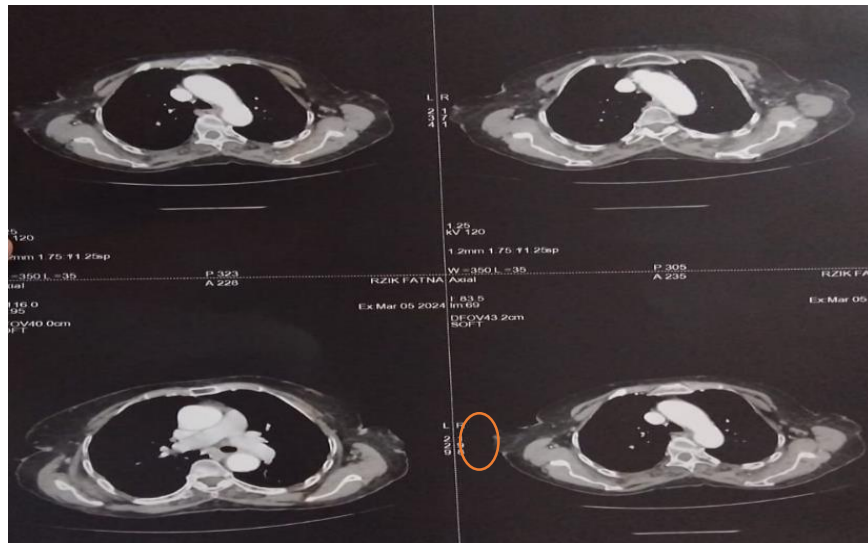


(Figure 2)

The patient's medical history reveals the presence of these two bilateral axillary masses since her menarche, with breast engorgement and milk discharge during breastfeeding.

An ultrasound scan was performed, revealing the presence of two formations initially suggestive of lipomas.

CT scan: (Figure 3) shows a 2 cm mass with regular contours in the right breast, sub-centimetre ipsilateral lymph nodes with two bilateral axillary formations, accessory breasts?



(Figure 3) : CT scan image showing two bilateral axillary formations

After consultation with the geriatric oncology department, the patient underwent neoadjuvant chemotherapy, followed by a total right mastectomy with ipsilateral lymph node dissection (at the patient's request, who opted for mastectomy and refused removal of her ipsilateral accessory breast). The postoperative period was complicated by lymphocele, which was drained several times.

The anatomopathological examination of the mastectomy specimen and axillary lymph node dissection showed no tumour residue after neoadjuvant treatment with lymph node dissection: 0N+/11N, i.e. a complete histological response.

The patient was referred to the radiotherapy department for discussion. Our clinical examination noted the presence of two axillary swellings. On the mastectomy side, the right formation was rounded, 4 cm in size, indurated, with no discharge or inflammatory signs. On the left, the formation was regular, soft in consistency and mobile (Figure 4).

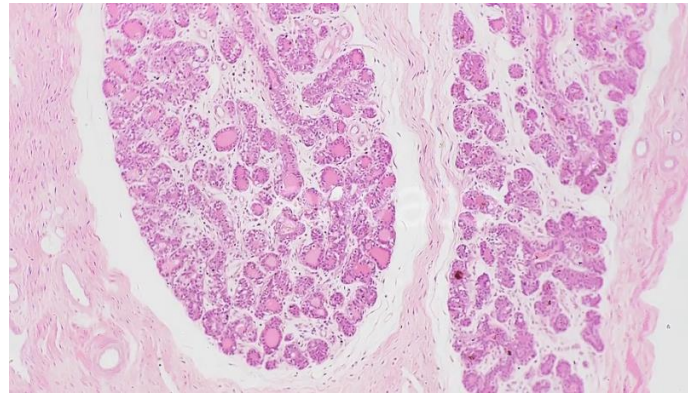


(Figure 4)

Echo-mammography showed a scar from a right mastectomy with no signs of local or lymph node recurrence, with a cystic formation in the right axillary hollow suggestive of a 16x11x8mm lymphocele.

After a multidisciplinary team meeting and discussion with the patient, the decision was made to perform an excision of the right axillary mass. The patient underwent surgical excision.

Histological examination confirmed the diagnosis of supernumerary breasts, showing the presence of adipose tissue containing numerous lobules and glandular acini, with no signs of malignancy (Figure 5).

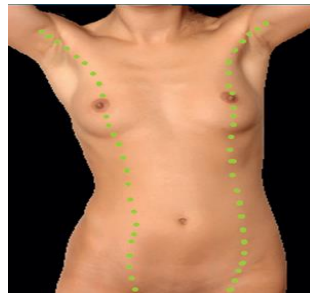


(Figure 5) : glandular lobules with no signs of malignancy

## Discussion

During the fourth week of embryonic life, breast development begins with the formation of the mammary ridge or lacteal line, which extends from the armpit to the groin fold [2]. The appearance of accessory mammary buds along this ridge and their persistence leads to supernumerary breasts (Figure 6).

Approximately 90% are located on the chest, 5% on the abdomen and 5% in the armpits. This anomaly is present at birth but is usually discovered during pregnancy or lactation. It can sometimes be difficult to diagnose, especially in the absence of an areola and breast discharge and, above all, due to the fatty nature of the accessory breasts, which can be confused with lipomas both clinically and on ultrasound [1].



(Figure 6) : milk line

The incidence of supernumerary breasts is uncertain, but it is estimated at 1% of the general population [3]. Supernumerary breasts are located in 90% of cases in the chest, in 5% of cases in the abdomen and in 5% of cases in the armpit [4].

Ectopic breast tissue can be subject to the same benign or malignant pathologies as normally positioned breasts. The authors have reported cases of fibroadenomas, phyllodes tumours [6-14], ductal, medullary and papillary carcinomas [5-6]. All types of breast cancer have been found in ectopic breast tissue [7-8].

Carcinoma of ectopic breast tissue accounts for approximately 0.3 to 0.6% of all breast cancers [9-10-11]. The incidence of malignant degeneration of ectopic breast tissue appears to be low.

Clinically, the diagnosis of supernumerary breast is often overlooked. This is explained by the frequent absence of the areola, even on ultrasound (the breast being composed, on the one hand, of connective-glandular tissue that appears hyperechoic, and, on the other hand, of adipose tissue that appears hypoechoic) [12]. Cases of supernumerary breasts have been mistaken for satellite lymphadenopathy of breast cancer.

Due to the possibility of cancer, any subcutaneous nodule of uncertain diagnosis near the milk line should be explored and benefit from an ultrasound and microbiopsy.

The therapeutic approach to ectopic breast tissue is controversial. Some authors recommend abstention unless there are complications, while others advocate systematic excision [13-14]. The purpose of removing a mass near the breast or on the milk line is to clarify its histological nature, to prevent complications such as malignant degeneration and to resolve the problem of monitoring [15].

In women at high risk of developing breast cancer, and due to the difficulties of screening through routine examinations, preventive resection of accessory breasts is recommended [16].

The current approach to cancer in ectopic breast tissue is based on surgery: mastectomy or wide excision. Mastectomy is generally performed using the standard technique.

The prognosis is considered poor, partly because early diagnosis is often difficult in this atypical location, and partly because the small size of the accessory gland causes rapid infiltration of the skin and chest wall. Furthermore, carcinoma of ectopic axillary breast tissue can metastasize to the lymph nodes earlier and more frequently than that of the normally inserted breast [17-18].

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