

# PRIMARY BREAST LYMPHOMA: A CASE REPORT

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## ABSTRACT

Primary breast lymphoma is a very rare condition. It is not always suspected clinically. Pathology examination on biopsy is the key of the diagnosis. We report a case of primary mammary lymphoma in a 76-year-old man. The study of this case allowed us to show the importance of research of histological diagnosis of breast cancers before therapeutic management.

Key words: breast cancer, lymphoma, Madagascar

## INTRODUCTION

Breast cancer is common. They are mostly developed at the expense of the epithelial tissue, producing the group of invasive breast carcinomas. Primary breast lymphoma is rare, accounting for 0.04 to 0.5% of all malignant breast tumors [1], and 2.2% of all extra-lymph node lymphomas [2]. In this study, we report a man's case of primary breast lymphoma, which has not yet been reported in Madagascar.

## CASE REPORT

He was a 76-year-old man with no specific medical and surgical history. He consulted for a nodule in the left breast ulcerating the skin. The disease was said to have started a few months earlier with the appearance of a small nodule in the left breast, which had rapidly enlarged and ulcerated the skin, prompting him to see a doctor.

The clinical examination showed a nodule in the left breast suspected of malignancy, with axillary lymphadenopathy, i.e. clinical stage IV (cT4N1). The extension report had shown no distant metastasis. Carcinological breast surgery with lymph node dissection was performed and the part was sent to pathology.

A 19x15x2 cm mastectomy piece with a 7x6x1 cm lymph node dissection had reached us at the pathology department. The breast had a skin ulceration 2 cm long, below which a wide range of fibrosis was observed after cutting, in contact with the skin and 1 cm from the limit of deep excision. The lymph node dissection contained 9 nodes ranging from 1 to 4 cm in long axis.

On histological examination, the range of fibrosis corresponded to a tumor proliferation composed of small and medium-sized lymphocytes, discreetly atypical, organized in diffuse layers (Fig 1). The tumor infiltrated the breast and ulcerated the skin. Six out of the nine lymph nodes were the site of the same tumor proliferation.

The diagnosis was non-Hodgkin's lymphoma, small cell, suggestive of low-grade MALT lymphoma; stage IIE according to the modified Ann Arbor classification. The patient was

treated in oncology for chemotherapy type CHOP. Currently, he is declared cured without recurrence.

## DISCUSSION

Primary breast lymphoma (PBL) is defined as a mainly mammary location of a lymphomatous proliferation [3]. Wiseman defined four criteria for the diagnosis of PBL [4]: adequate histological sampling, close association between breast tissue and lymphomatous infiltration, absence of extra-mammary lymphoma, absence of metastases of the disease with the exception of ipsilateral axillary lymphadenopathies.

PBL is a rare pathology generally affecting women [3,5], however, as in our case, men's cases have been reported. Breast cancer in men is rare, and accounts for less than 1% of breast cancer [6,7].

Regarding age, two frequency peaks were noted, a first peak in young women, of reproductive age often during pregnancy, the second more important, between 50 and 60 years old [8]. In our case, the patient is even older (76 years), because breast cancer in men occurs mainly in elderly patients, with a peak incidence at 71 years [6].

The clinical sign is non-specific and is dominated by the presence of a painless mass in the breast in 85% of cases [4]. More rarely, it can be an inflammatory breast tumor simulating carcinomatous mastitis. Axillary lymphadenopathy is found in 20 to 40% of cases [9].

Mammography is also non-specific and has no diagnostic value. Most often, it is an isolated mass with irregular boundaries (50%). A partially well limited mass is found in 37.5% of cases, an aspect of benign tumor can be seen in 12.5% of cases, and finally a less frequent aspect, which is a diffuse involvement leading to an increase in parenchymal density with or without skin involvement [10].

In the case of our patient, the presence of a skin-ulcerating nodule with ipsilateral axillary lymphadenopathy alerted him to see a doctor.

The key examination is the histopathology study after biopsy or tumor excision. Unfortunately, the very suspicious clinical presentation of malignancy in our patient immediately led the doctor to make a mastectomy with ipsilateral lymph node dissection, without seeking prior diagnosis.

The most common histological type is diffuse large B-cell lymphoma [11]. MALT type low-grade lymphomas like that of our patient are the second histological types in order of incidence [11].

Based on Wiseman's definition, PBL is classified as IE or IIE according to the modified Ann Arbor classification. Therefore, patients are defined as belonging to an "early stage". Beyond these stages, the primitive mammary origin would be doubtful.

The standard treatment is the combination of chemotherapy - radiotherapy. Chemotherapy helps reduce relapses [12]. Surgical treatment has not proven to be effective and is not indicated [13].

## CONCLUSION

Primary breast lymphoma is rare, especially in men. The clinical presentation and imagery are non-specific. The key to diagnosis is the histopathological study after biopsy. The study

of this case highlighted the importance of diagnostic research by biopsy before surgical management of mammary tumors, even very suspected of malignancy.

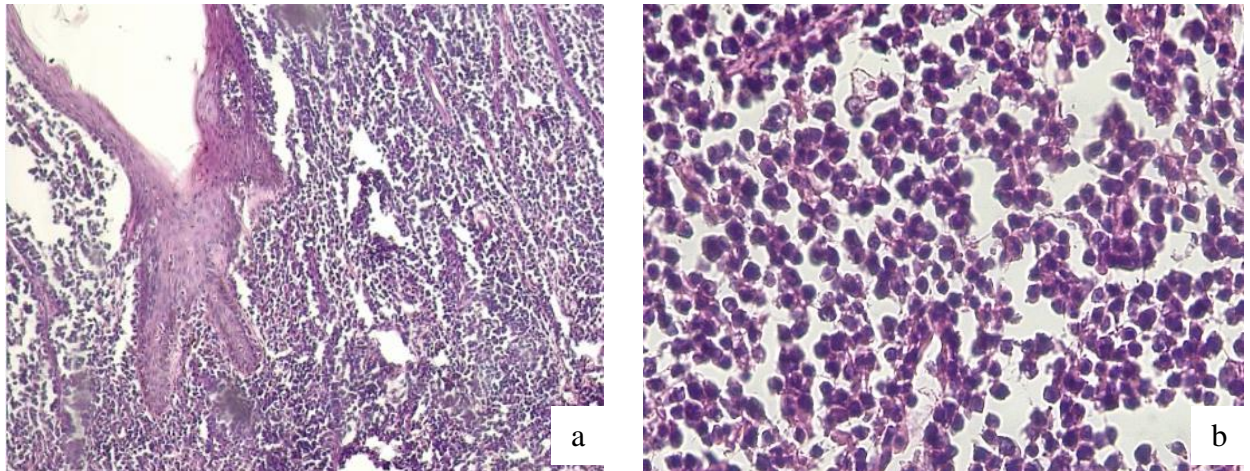


Figure 1 : Breast Non Hodgkin Lymphoma. Tumor proliferation composed of small and medium-sized lymphocytes, with little atypia, organized in diffuse layers. HE x40 (a) x200 (b). Source: Department of Pathology, Joseph Ravoahangy Andrianavalona University Hospital, Antananarivo Madagascar.

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