Dear Editor,

Diabetic mastopathy is an uncommon fibrous proliferation very similar to a real breast tumor and its etiology is not yet completely clear. We report a case of this unusual diagnosis in a 72-year-old woman. The patient had type 1 diabetes complicated by retinopathy for 36 years but no other endocrine pathologies. The patient glucose values were frequently above 250 mg/dL, particularly in situation of stress, such as she had cataract removal.

When the patient came to our ward showed two adjacent mammary nodules located in the superior external quadrant of the left breast about 1 cm in diameter large, without lymphadenopathy in the ipsilateral axillary fossa.

We decided to refer the patient for mammography and an excision biopsy of the lesion. Mammography showed presence of fibrous-glandular tissue, without visible confluent micro-calciﬁcations. Macroscopically the biopsy was represented by mammary parenchyma 7 cm x 3 cm x 3.5 cm large with overhanging skin: in the middle was evident a thickened area 4.5 cm in diameter. Microscopically this thickened area was characterized by fibrosis and sclerosis, with a moderate inﬂammation intra-lobular, peri-lobular and peri-vascular lymphocytes and mononuclear cells were present. Lobular structures of mammary parenchyma were atrophic. An immunophenotype study was performed using antibodies against T (CD3) and B (L26/CD20) cells, and most of lymphocytes localized in the inflamed area were type B (CD20+). Skin was free of signiﬁcant histological alterations. This histological pattern gives evidence for lymphocytic mastopathy, which sometimes is associated with diabetic pathology (Figures 1 and 2).

A literature search revealed that diabetic mastopathy usually affects women with type 1 diabetes in premenopausal age; our patient was in postmenopausal age, which is therefore

Figure 1. Magnification 25 ×. Eosin ematossilin coloration. One can observe dense sclerosis and micronodular aggregates spread out with small lymphocytes in which terminal lobules are present.
unusual. However, the histopathologic analysis of our case was in agreement with reports of this condition.

Several Authors suggest that this pathology is caused by an auto-immune reaction: elevated blood values of glycemia induce an extracellular matrix glycosylation that simulates a neo-antigen triggering an immune reaction characterized by B lymphocytes proliferation and antibody formation.

Diabetic mastopathy is not associated to a later breast cancer development. When the lesion is one sided the excision biopsy is enough, but 63% of the cases present bilateral lesions, these factors showed that mastopathy usually involves multicentric areas of mammary parenchyma.

The following factors have to be present to make diagnosis of diabetic mastopathy:

- Pre or postmenopausal patient with a long history of type 1 diabetes associated with vascular complications, but it’s not necessary the patient to be affected by other endocrinopathies or autoimmune disorders.
- A lesion with thickness that simulates a mammary carcinoma.
- Mammography has to show density increase in the breast tissues, without confluent micro-calculations. Ultrasounds cannot identify these solid or cystic masses.
- The excision biopsy shows dense fibrous colloid with peri-ductal, peri-lobular and peri-vascular infiltrations. Fibroblastic epithelioma may or may not be present.

References