

Breast fibromatosis

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Section: Breast imaging

Area of Interest: Breast

Procedure: Diagnostic procedure

Imaging Technique: Mammography

Imaging Technique: PACS

Special Focus: Neoplasia Case Type: Clinical Cases

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Patient: 38 years, female

Clinical History:

A 38-year-old woman with a palpable lump.

Imaging Findings:

Mammography indicated a spiculated left mass at 9 o'clock, with no suspicious calcifications (Fig. 1).

Ultrasound demonstrated a solid mass with angled, indistinct margins and retraction of Cooper's ligaments. No suspicious lymph nodes were found (Fig. 2).

A BI-RADS category 5 was given.

A core needle biopsy was performed and the histopatological diagnosis was:

Breast fibromatosis (desmoid tumour) (Fig. 3).

Discussion:

Breast fibromatosis or desmoid tumour of the breast corresponds to less than 0.2% of mammary tumours.

It is a locally aggressive proliferation, with no potential for metastasis, consisting of fibroblastic and myofibroblastic cells that infiltrate the breast stroma.

It has a high local recurrence rate (29%) due to infiltrative margins.

Clinically and radiologically it is indistinguishable from a carcinoma, the most common presentation is a spiculated mass without associated calcifications or lymphadenopathy.

It may occur spontaneously or be associated with a history of trauma or surgery (augmentation or reduction mammoplasty).

The diagnosis is histopathological: Low-grade spindle cell proliferations composed of interlacing fibroblastic bundles and fascicles with varying degrees of collagen surrounding normal breast parenchyma; expression of beta-catenin, with negativity for high molecular weight cytokeratins and negativity for CD34 being the hallmark.

The treatment is complete surgical excision. [1, 2, 3, 4, 5, 6]

We must remember that a spiculated mass with no calcifications and suspicious lymph nodes with a histologic diagnosis of breast fibromatosis is a concordant radiologic-pathologic correlation.

Differential Diagnosis List: Breast fibromatosis (desmoid tumour), Metaplastic carcinoma; spindle cell type, Lowgrade fibrosarcoma, Nodular fasciitis, Scar or biopsy site reaction

Final Diagnosis: Breast fibromatosis (desmoid tumour).

References:

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Figure 1

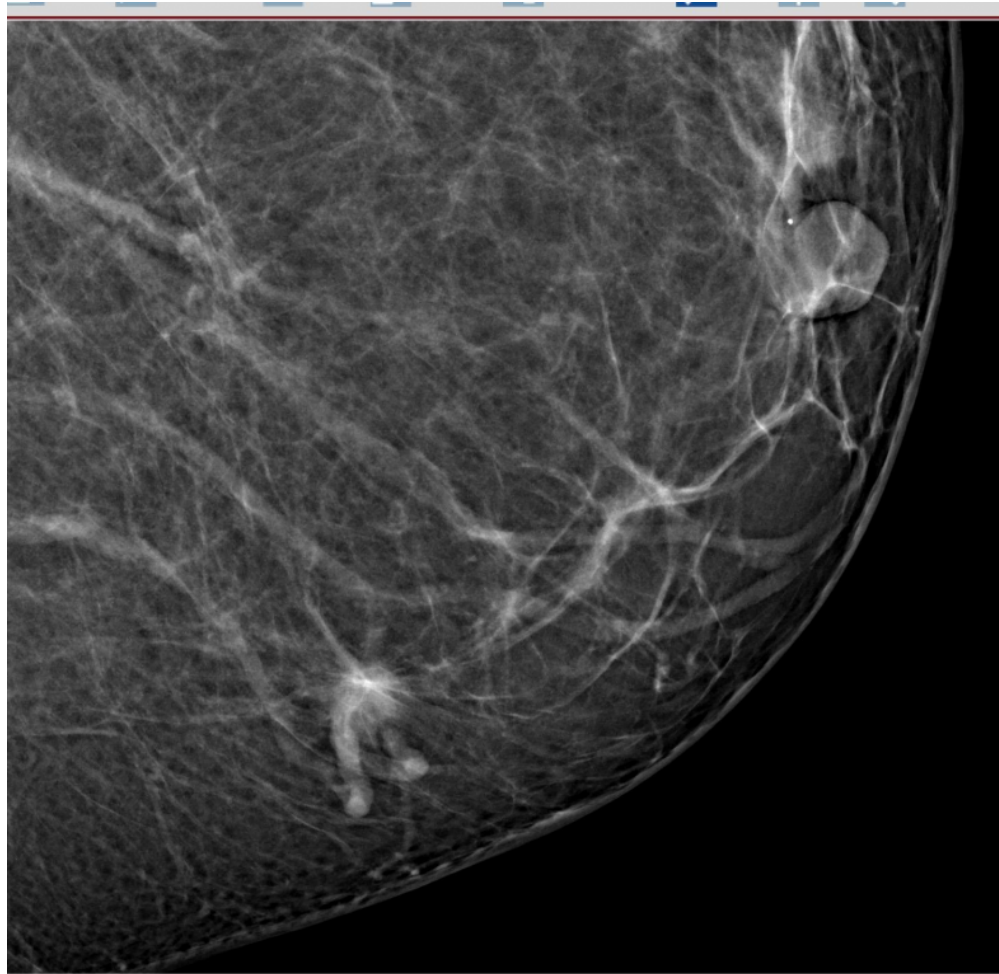
a



Description: MLO view. A spiculated left mass is seen at 9 o'clock, with no suspicious calcifications.

Origin: Instituto de enfermedades de la mama. FUCAM A. C. Mexico City, Mexico.

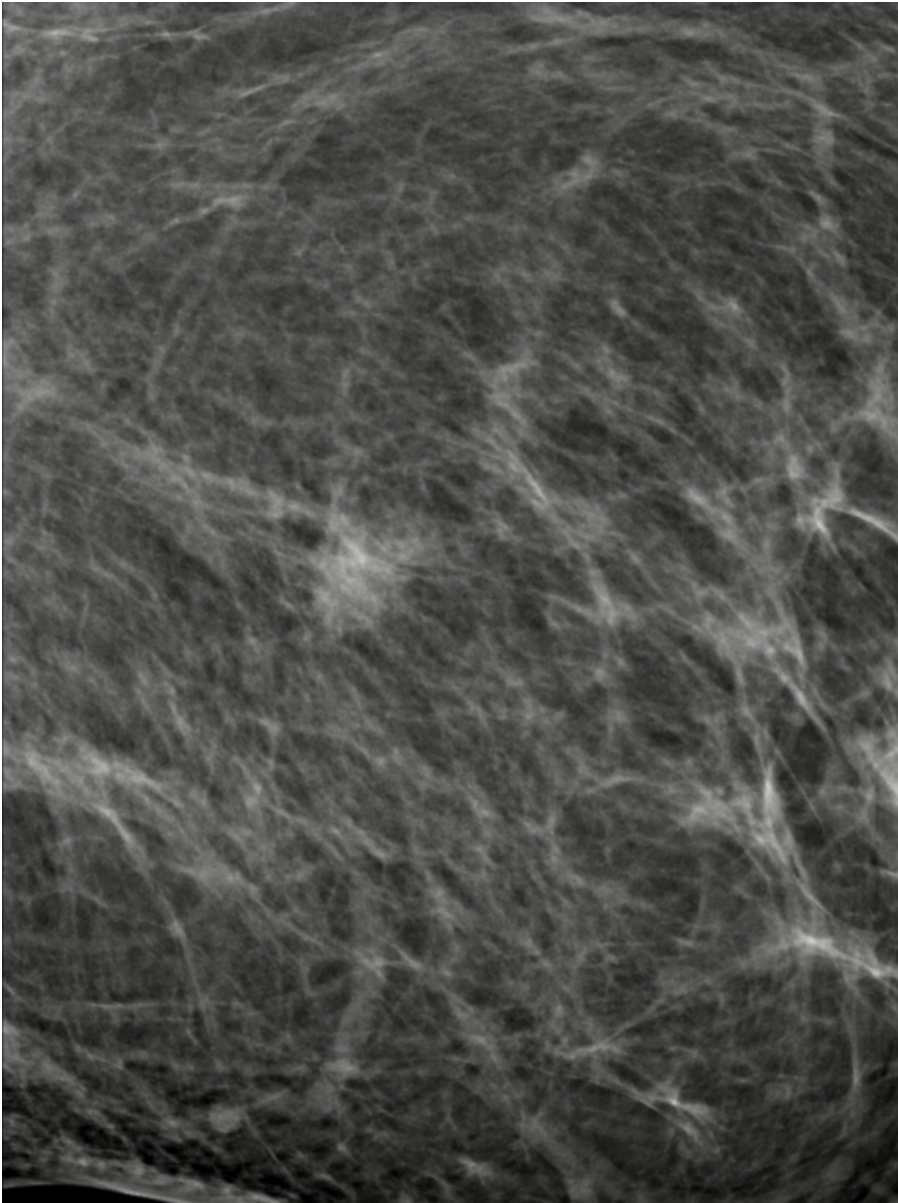
b



Description: CC view. A spiculated left mass is seen at 9 o'clock, with no suspicious calcifications.

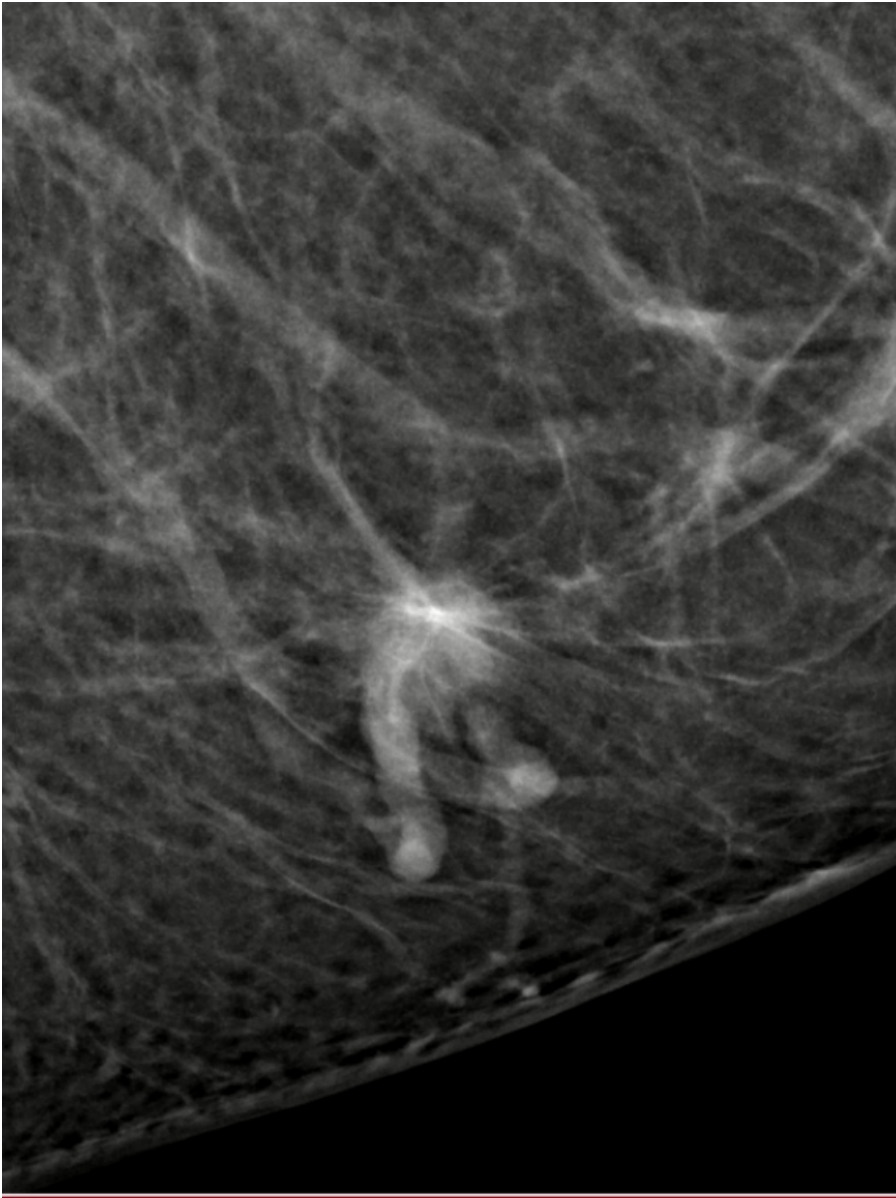
Origin: Instituto de enfermedades de la mama. FUCAM A. C.

c



Description: MLO view, close up. A spiculated left mass is seen at 9 o'clock, with no suspicious calcifications. **Origin:** Instituto de enfermedades de la mama. FUCAM A. C.

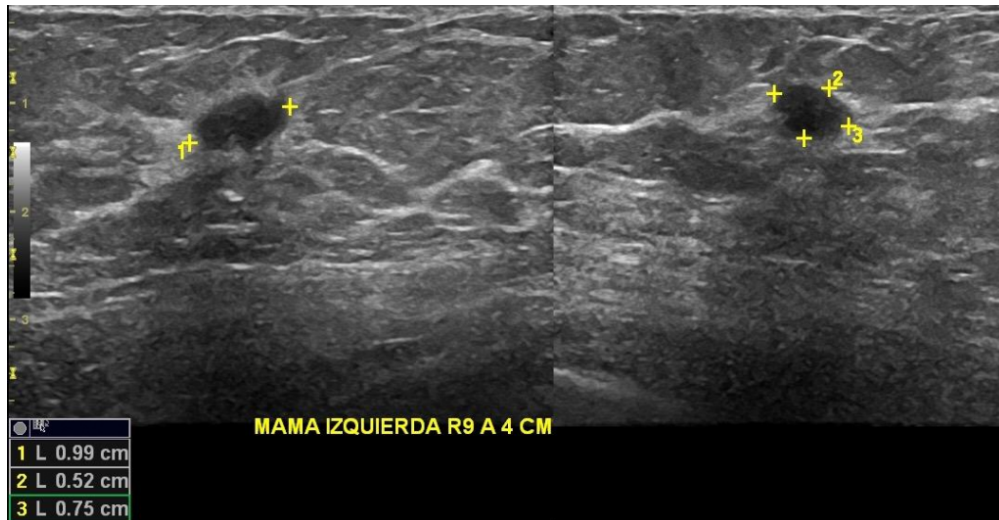
d



Description: CC view. Close up. A spiculated left mass is seen at 9 o'clock, with no suspicious calcifications. **Origin:** Instituto de enfermedades de la mama. FUCAM A. C.

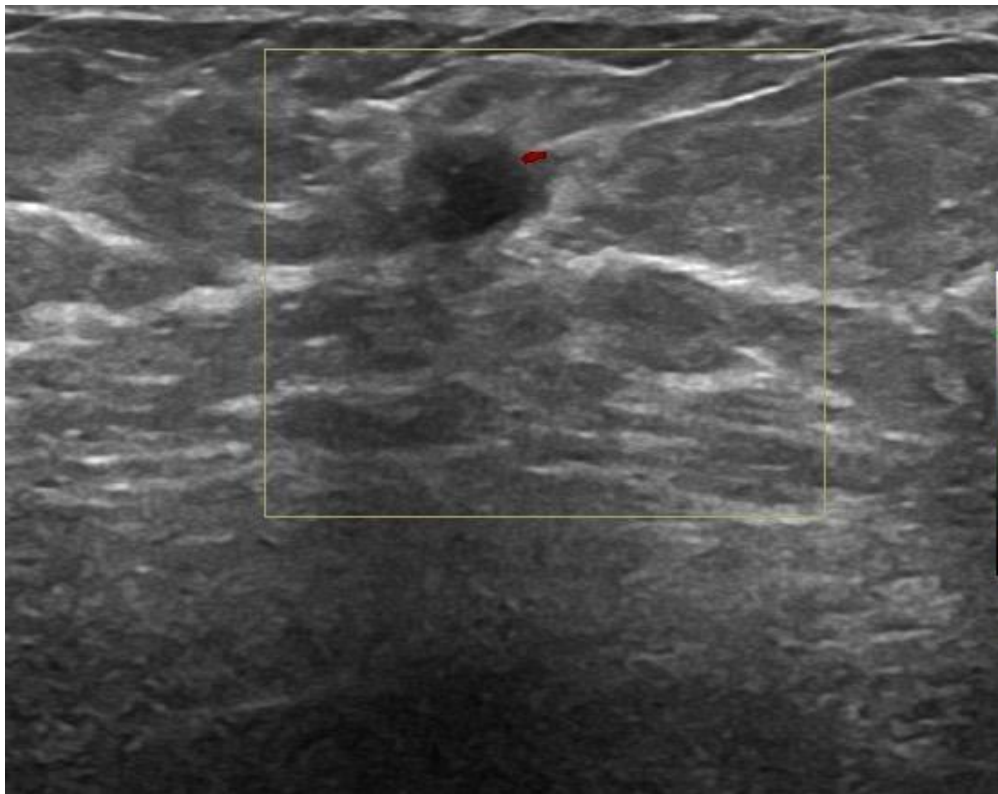
Figure 2

a



Description: Ultrasound: there is a solid mass with angled and indistinct margins, retraction of Cooper's ligaments. **Origin:** Instituto de enfermedades de la mama. FUCAM A. C.

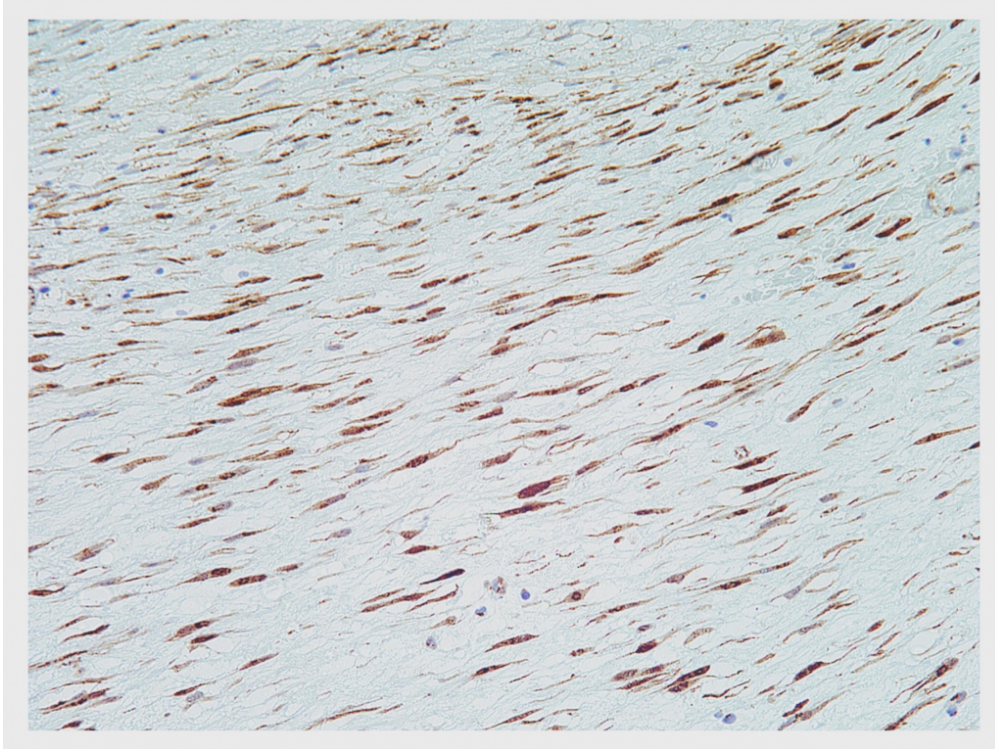
b



Description: Peripheral vascularity is present. **Origin:** Instituto de enfermedades de la mama. FUCAM A. C.

Figure 3

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Description: Photomicrograph from the left breast tru- cut specimen demonstrates low-grade spindle cell proliferations; expression of beta-catenin, consistent with breast fibromatosis. **Origin:** Instituto de enfermedades de la mama. FUCAM A. C.