

<https://doi.org/10.29289/259453942025V35S1142>

# Primary breast amyloidosis: case report and literature review

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**Objective:** To describe a case of primary breast amyloidosis and present a literature review. This is an extremely rare condition, accounting for 0.5% of amyloidosis cases, which, in turn, represents 12.8% of primary amyloid tumors. It occurs mainly in elderly and post-menopausal women. It results in fibrillar layers of beta-pleated amorphous Congo protein deposition in the extracapsular space. **Methods:** As this is an uncommon diagnosis, there are few case series published in the literature since amyloidosis was first reported in 1973, highlighting the rare nature of this disease. In order to write the following case report, the authors performed a literature review on PubMed, LILACS, NICE, and clinical trial platforms, using the descriptors “primary amyloidosis” and “breast” and the Boolean operator AND. Among 55 publications, eight articles from the last five years were selected. **Results:** Female patient, 64 years old, with no family history of amyloidosis, primary history of breast cancer, diagnosed on mammographic screening due to an asymmetric focal area, with imprecise limits, irregular contours, in the union of the upper quadrants of the left breast (BI-RADS 4A), which persisted after selective compression. Magnetic resonance imaging showed non-nodular enhancement of 1.2 cm. The patient underwent pre-surgical marking with iodine seed and subsequent radioguided occult lesion localization (ROLL). The anatomopathological examination and the search for amyloid deposits by Congo red in polarized light revealed that it was an amyloid tumor of the breast. **Conclusion:** The risk factors for primary breast amyloidosis are not well known, but may be associated with autoimmune disease, lymphoproliferative disease, and advanced age. There is no evidence that family history and breast density are related. The recommended treatment is usually surgical removal of the suspected area, which usually results in good outcome.

**Keywords:** primary amyloidosis; breast.