

EXTRACAPSULAR RUPTURE OF A BREAST IMPLANT WITH CONTRALATERAL LYMPHADENOPATHY: A CASE REPORT

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Abstract: Goals: To report the case of a patient with a history of left radical mastectomy, associated with the inclusion of a breast implant, with subsequent rupture of the prosthesis capsule. **Methodology:** Review of medical records, interview with the patient, photographic record of diagnostic methods and literature review. **Case report:** Female, 52 years old, who underwent left radical mastectomy in 2003 due to Paget's disease and a silicone breast implant was inserted in the respective breast. She evolved with extracapsular rupture of the implant, associated with ipsilateral axillary silicone lymphadenopathy, in 2020. Finally, she underwent prosthesis explant surgery in 2021, with immediate completion of fat grafting in the left breast, which had previously been mastectomized, and removal of right breast tissue for mastoplasty and breast proportion. **Final considerations:** Despite being a simple procedure, breast surgeries have complications and it is necessary to disclose them to patients before performing the intervention.

Keywords: Post-operative complications; Breast Implant; mastectomy.

INTRODUCTION

Brazil is one of the world leaders in the number of plastic surgery procedures, with women responsible for more than 80% of these (CHARLES, 2019). According to the International Society of Aesthetic Surgery, in 2020, 401,531 breast surgeries were performed, making it the main procedure in plastic surgery in the country. Of these, 172,485 were for breast augmentation and 25,475 for implant removal (ISAPS, 2022).

The use of prostheses has become increasingly popular, both in breast augmentation and breast reconstruction. Since the beginning of the use of prostheses, several models have been developed, presenting

significant differences between them, with a varied number of brands available on the market (MONTEIRO; MANGIAVACCHI; MACHADO, 2022).

Several clinical studies are being conducted to understand the effect of the breast implant, as well as the decrease in the number of consequences inherent to the procedure (SOUZA, 2013). Most women do not have complications, however there are some risk factors for this occurrence, such as smoking, obesity and radiotherapy, in addition to the type of mastectomy, implant, size, flap, use of fat grafting, previous abdominal surgery, comorbidities and the surgeon's experience (SOARES, et al, 2022).

Thus, the objective of this research is to report the case of a patient who underwent left radical mastectomy, who underwent the inclusion of a breast implant and had its extracapsular rupture.

METHODS

The information contained in this article was obtained through interviews with the patient, review of medical records, photographic records of diagnostic tests and literature review.

CASE REPORT

Patient, female, 52 years old, who underwent left radical mastectomy in December 2003 due to Carcinoma in Situ (Paget's Disease) and a silicone breast implant was inserted in the respective breast. She had performed a procedure at a service in another municipality, and no information was found on the position of insertion of the prosthesis, volume or brand. She mentioned having been guided by a plastic surgeon about the importance of changing breast implants in 10 years, but she did not return to the service.

As of 2005, she started assistance at the Mastology Outpatient Clinic of the

Patos de Minas-MG City Hall, in annual clinical and mammographic follow-up. In a mammogram performed on 09/09/2020, right lymphadenomegaly was evidenced, with no other findings. The patient attended the consultation asymptomatic and, on physical examination, no nodules or palpable masses were found. Thus, it was decided to perform an ultrasound of the breasts and armpits to better elucidate the case.

The ultrasound examination performed on 10/20/2020 suggested right lymph node enlargement of 3.7 cm, with loss of usual echotexture and “dirty posterior shadow”, without nodules or cysts, and preserved areolar-papillary complex. On the left, she had lymph nodes with the same characteristics as the contralateral breast, but 1.5 cm in size, in addition to a pre-pectoral breast implant on the left after mastectomy, with slightly lobulated contours, anechoic and homogeneous content, with no signs of intra or extracapsular rupture.

After ultrasound analysis, on 11/12/2020 the patient underwent excision of sentinel lymph nodes in the right armpit, four lymph nodes were removed, the largest being 2.1x1.5x1.1cm. Macroscopically, a histopathological picture suggestive of infiltration by silicone-like material was detected in three of the four lymph nodes and a hyperplastic reactionary state of one lymph node, with no signs of malignancy. After the results, it was decided to perform MRI.

The same was performed on 12/09/2020 and concluded findings suggestive of extracapsular rupture of the left breast implant, associated with ipsilateral axillary silicone lymphadenopathy, in addition to mastectomy sites on the left, right breast category BI-RADS RM 1 and breast left BI-RADS RM 2 (Image 1).

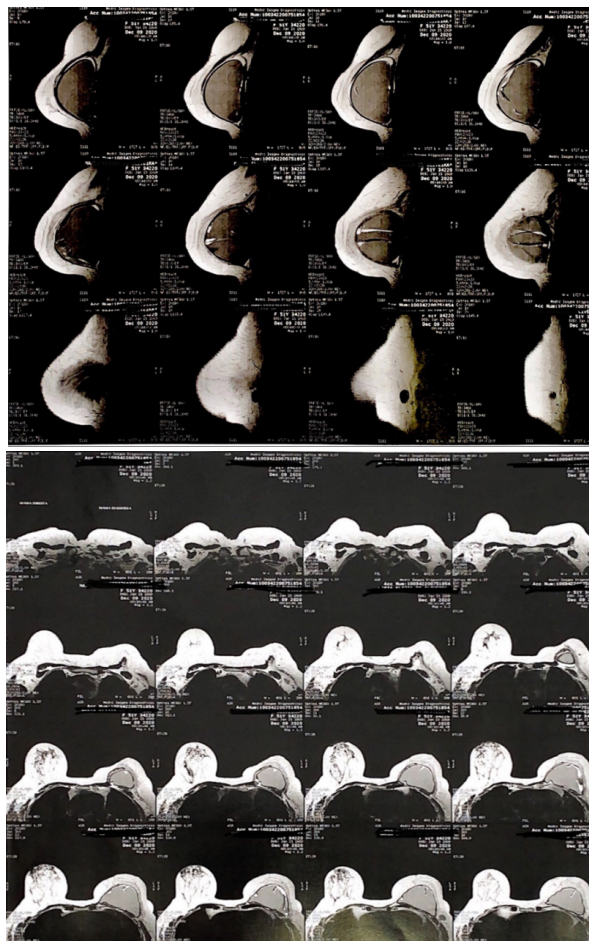


Image 1: Breast MRI 12/09/2020

After viewing the results, it was decided to remove the broken prosthesis. The patient underwent prosthesis explant surgery on 04/12/2021, with immediate completion of fat grafting in the left breast, which had previously been mastectomized, and breast tissue removal in the right breast for mastoplasty and breast proportion.

The anatomopathological examination of the surgery detected a histopathological picture suggestive of silicone granuloma in dense membranous fibrous connective tissue, associated with chronic granulomatous inflammation of the foreign body type on the left; and right stromal fibrosis and adiposity.

At the end of the breast correction procedures, the patient reported great satisfaction with the results and remains

without complaints. She has frequent follow-up at the Mastology outpatient clinic of the city of Patos de Minas- MG.

DISCUSSION

Surgery to place breast implants is a common procedure, but it is not free of complications. With the evolution of quality and technique in implant insertion, complication rates have been reduced. Among the earlier complications, surgical site infection and local hematoma stand out, while the later ones are: capsular contracture, capsular rupture, adenomegaly in the internal mammary chain, anaplastic large cell lymphoma and complications related to the breast reconstruction process, associated with the breast implants themselves (SCHMITT, 2018).

Capsular rupture is characterized by the loss of integrity of the prosthesis, being asymptomatic in most cases. It can be manifested by undulations, focal herniations, asymmetries or calcifications. (SCHMITT, 2018). It can be intracapsular, being limited to the interior of the capsule, or extracapsular, in which there may be silicone material dissipated in the breast tissue, even affecting

the lymphoid tissues. The extracapsular rupture can also simulate lesions, due to the formation of granulomas (GOODWIN, et al, 2005).

There are also factors related to the aging of the prostheses, and the material involved in their composition and coating, with implants of the PIP and Rofil brands, inserted mainly before 2010, with high rates of rupture and other complications in clinical studies. Thus, they had their use and commercialization suspended by ANVISA (SOUZA, 2013).

CONCLUSION

Although it is a simple procedure, breast surgeries have complications. Despite the popularity of the inclusion of breast implants and the increasing number of procedures performed in Brazil, there is little knowledge about such complications on the part of clients who are interested in the surgery.

It is important for patients to be aware of the complications of such procedures, as well as the importance of proper follow-up. It is up to the surgeon doctor to elucidate the risks and clarify the patients' doubts during medical consultations, before performing such procedures.

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