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Case Report

Delayed, dramatic breast swelling in a transgender woman: a case report

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Abstract

Background: As the number of gender-affirming procedures performed in the United States increases, physicians caring for gender-nonconforming patients, regardless of practice location and focus, will likely encounter transgender women with breast implants. Increasingly, transgender women are seeking breast feminization. However, this population is less consistently receiving surveillance and routine breast care than cisgender women.
Aim: This report aims to add to the growing body of knowledge addressing breast augmentation complications in transgender women and to highlight disparities in healthcare.
Methods: A case of breast implant–associated seroma at our institution was analyzed through chart review. A literature review was conducted using PubMed to gather all articles discussing breast implant–associated fluid collections in transgender patients. Prior to publication of this report, a Waiver of Consent was granted by the E.R.'s Institutional Review Board for the study under which this article was prepared.
Results: Our patient was an African American transgender woman presenting initially at age 60 with significant asymmetry due to dramatic swelling of her left breast. The patient underwent bilateral breast augmentation outside of the United States 2 decades prior. The patient noted a gradual painless increase in her left breast size starting 3 years prior. She admitted that she was hesitant to seek a second opinion after being treated dismissively by another surgeon. Subsequent management included mammography and mirrored recommendations for late breast implant–associated seromas in cisgender patients: ultrasound, aspiration for cytology and culture, and removal of the implant and capsule.
Outcomes: The fluid collection in our patient was determined to be a chronic hematoma and was managed surgically. Though this patient eventually achieved a good outcome, treatment was delayed due to barriers she faced as a transgender woman.
Clinical Implications: Literature demonstrates that recommended management of late-onset breast-implant-associated seroma does not differ based on gender identity; however, transgender and GNC adults are more likely to receive less thorough care than cisgender women. Any patients undergoing breast augmentation with implants should be routinely evaluated for late complications, including seromas, which require prompt attention and methodical evaluation due to their potentially malignant nature.
Strengths and Limitations: This article is limited in that it is a single report of breast seroma. It is strengthened by a PubMed review gathering all articles discussing breast-implant-associated fluid collections in transgender patients.
Conclusion: We propose better education of physicians on how to care for transgender and gender-diverse patients should help mitigate the neglect and late presentation of such medical conditions in this vulnerable and marginalized population.

Keywords: transgender; breast implants; seroma; hematoma; case report.

Introduction

As the number of gender-affirming procedures performed in the United States increases, physicians caring for gender-nonconforming patients, regardless of practice location and focus, will likely encounter women with breast implants. Increasingly, transgender women, typically on estrogen hormone therapy, are seeking breast augmentation. For many patients, this is a central aspect of medical care and sexual health. However, this population is less consistently receiving surveillance and routine breast care than cisgender women.

Risks associated with implant-based breast augmentation and reconstruction are well known, both immediately after surgery and for years following. In some cases, a periprosthetic fluid collection (seroma) may develop within the implant capsule. Seromas are common in the early postoperative period but are uncommon in the late (>1 year) postoperative period, then referred to as late-onset seromas.[1] If an ultrasound assessment of an enlarged breast reveals a seroma, fluid should be sampled by ultrasound-guided aspiration and the specimen sent for culture, cytology, and immunocytochemical analysis or flow cytometry.[1] The differential diagnosis includes infection or inflammation, breast implant–associated anaplastic large cell lymphoma (BIA-ALCL) and other less common malignancies, synovial metaplasia, ventriculoperitoneal (VP) shunt migration, and hematoma. If white blood cells and/or microorganisms predominate, a clinical picture of inflammation or infection is possible. If cancer cells, including those associated with T cell malignancies are present, oncologic workup is indicated to rule out BIA-ALCL and other lymphomas.[1] Synovial metaplasia can be identified

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Figure 1. Patient presentation with dramatic breast enlargement more than 20 years after breast augmentation.

histologically by its close resemblance to synovial tissue.[2] In patients with a history of a VP shunt, shunt migration and cerebrospinal fluid collection should be suspected. A hematoma can be identified by both fluid color and the predominance of red blood cells.[1]

Here, we report a unique case of significant unilateral breast enlargement in a transgender woman presenting decades after gender-affirming breast augmentation surgery. Following workup, the fluid causing breast enlargement was determined to be a spontaneous hematoma that was managed surgically with resection and extensive reconstruction. While our patient achieved a good outcome, she faced multiple barriers that delayed her care. Because late-onset peri-implant fluid collections have malignant potential, this case should serve as a reminder of potentially catastrophic outcomes that could occur when care is delayed.

Patient information

Our patient was an African American transgender woman who first presented in 2020 at 60 years of age with a very enlarged left breast. She underwent bilateral breast augmentation outside the United States with implants of unknown size or type 2 decades prior to presentation. The patient noted a gradual painless increase in her left breast size beginning 3 years prior, without history of trauma or accompanying symptoms. She admitted that she was hesitant to seek a second opinion after being treated dismissively by another surgeon.

Prior to publication of this report, a waiver of consent was granted by the E.R.'s Institutional Review Board on October 1, 2022, for the study under which this article was prepared, entitled "Gender Affirming Surgery" (Protocol # 55242).

Clinical findings

Upon examination, nontender but significant left breast enlargement (basketball shape and size) was noted (Figure 1). The breast was firm, consistent with either solid tumor or fluid-filled cavity. The skin overlying both breasts had homogeneous pigmentation without rashes or suspicious lesions. The initial differential diagnosis included infection, malignancy, and hematoma. The size of the left breast made synovial metaplasia very unlikely. Moreover, the patient did not present with typical symptoms of infection, making BIA-ALCL, tumor, or hematoma the most likely diagnosis. The plan of care was to diagnose the patient with a mammogram and ultrasound-assisted biopsy of the left breast including culture, cytology, and immunohistochemical analysis of any fluid or tissue obtained to rule out BIA-ALCL.

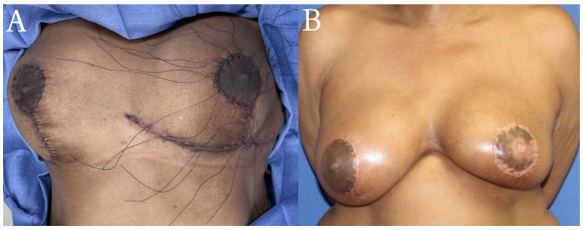

Figure 2. (A) Postoperative results on table with bilateral implants, right vertical scar lift, and left anchor pattern auto-augmentation as well as nipple-areola graft, and (B) 3-month postoperative result.

Diagnostic assessment

The mammogram initially confused the mammographer, who did not appreciate the left breast density as drainable fluid, but rather called it a large implant. As a result, the brown milky fluid was instead percutaneously sampled by needle aspiration in the surgeon's office and sent for culture, cytology, and immunohistochemistry. The cytopathology report was negative for malignant cells including CD30 and ALK markers, reducing the likelihood of BIA-ALCL. Siderophages and many red blood cells were isolated, however, consistent with hematoma. Bleeding dyscrasia was ruled out through blood testing.

Therapeutic intervention

Surgery was planned, and the procedure included removal of both smooth gel implants (intact on the left but ruptured on the right), bilateral total capsulectomies, right breast vertical scar lift, auto-augmentation of the left breast using the expanded skin flaps, and placement of smooth cohesive moderate-profile gel breast implants bilaterally (640 cm^3 on the right and 755 cm^3 on the left), and full thickness skin grafting of the left nipple–areola complex. The excised capsules surrounding the implants were extremely thick, leathery, and fibrous. More than 5 L of milky brown fluid was evacuated from the left breast. The capsules and fluid were sent for histology and cytopathology, which concluded the fluid was negative for malignant cells.

Follow-up and outcomes

Much improved symmetry was achieved on table (Figure 2A), and at 3 months follow-up, the breasts were healing well with some hypopigmentation of the left nipple-areola as well as some volumetric asymmetry due to overcorrection of the left breast (Figure 2B). The patient declined further symmetrizing procedures and was satisfied with her result.

Discussion

Hematoma as a complication of breast augmentation typically occurs within 3 days of breast implant surgery.[3] Late hematomas (more than 3 months postoperatively) are less common but should be suspected if there is a history of trauma, and can also occur spontaneously.[1,3] Because our patient reported no trauma prior to onset of breast enlargement, late presentation with hematoma is surprising. A literature review was conducted using PubMed to gather all articles discussing breast implant–associated fluid collections

in transgender patients. Five articles discussing 9 patients with periprosthetic fluid were found.[2,4-7] Diagnoses included BIA-ALCL (n = 2), VP shunt migration (n = 1), early-onset hematoma (n = 2), hematoma of undescribed timing (n = 1), and late-onset seroma without explanation (n = 3). Our case of breast augmentation–associated late-onset hematoma in a transgender woman is unique, and fortunately, hematoma is a benign cause of late-onset breast enlargement. Because of its malignant potential, patients with breast augmentation–associated late-onset seromas must be taken seriously and managed promptly. Based on the literature, the management of breast augmentation–associated late-onset seromas in transgender patients should mirror that in cisgender women. Keeping in mind that management protocols should not differ among gender-diverse patients, differences in care reflect a combination of healthcare disparities, miseducation of physicians, and fear of some patients to seek appropriate medical attention.

Though our patient eventually achieved a good outcome, treatment was delayed due to several barriers. Like many gender-nonconforming (GNC) patients, she sought initial gender-affirming surgical care outside the United States due to a lack of insurance coverage and distrust of the healthcare system's handling of transgender people. Less regulated standards of care, mismanagement of complications, and lack of legal or financial recourse in cases of malpractice are all risks associated with medical tourism. Mistrust of the mainstream healthcare system is often described by individuals belonging to historically marginalized groups such as minorities of gender identity, race, insurance status, or sexual orientation.[8,9] A reputable but non–gender-affirming surgeon that the patient saw prior to our consultation made her feel uncomfortable and judged her for her gender identity and assumed socioeconomic class. As demonstrated by Gonzales and Henning-Smith,[10] transgender and GNC adults are more likely to be uninsured and receive less thorough care than cisgender women. We propose that healthcare providers should receive greater education in caring for transgender and GNC individuals. This should include fostering a better understanding of both clinical issues and social concerns of gender identity minorities. Moreover, if providers feel ill-equipped to help transgender and GNC individuals, they should have a low threshold to refer them to specialists with the training and experience to treat such patients.

This case demonstrates the consequences of barriers to care experienced by some transgender and GNC individuals, often originating from a lack of acceptance and awareness by healthcare providers and the resulting distrust of healthcare providers by marginalized patients.[10] Delayed diagnosis and treatment of a malignancy can have catastrophic outcomes. Better education of both primary care and specialty physicians should help mitigate the neglect and late presentation of such medical conditions.

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None declared.

Author contributions

K.S.: investigation and writing – original draft; N.M.: writing – review and editing; M.G.: writing – review and editing; E.R.: conceptualization, supervision, writing – review and editing.

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Conflict of Interest

The authors declare that they have no conflict of interest.

Data Availability

Patient chart information analyzed for this article is not publicly available due to patient-protected information status but may be available from the corresponding author upon reasonable request.

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