



Novel Breast-Reduction Based Technique as a Curative Approach for Chronic Nonhealing & Fibrotic Bilateral Breast Wounds with Chronic Mastitis: A Case Report



TULANE UNIVERSITY

Ross Jacobson, MBA¹; Ireland Coates, MS¹; James Pai, MS²; Jessica Reid, MS¹; Noura Mohamad Jawhar, MD³
[1] Tulane School of Medicine [2] Tulane School of Medicine, Department of Surgery [3] Tulane Surgery, Division of Plastic Surgery

Introduction

- Recurrent subareolar abscesses in nonlactating women represent a challenging clinical entity characterized by chronic inflammation, sinus tract formation, and high recurrence rates [1,2]
- Conventional management includes antibiotics, incision and drainage, and limited excision, yet durable resolution is often difficult to achieve
- When disease involves the nipple–areolar complex (NAC), treatment must balance definitive excision with preservation of breast contour and aesthetics
- This case demonstrates a reduction-pattern surgical approach for definitive management of chronic inflammatory breast disease

Case Presentation

- 45-year-old female with severe macromastia presenting with recurrent bilateral subareolar abscesses and chronic drainage
- Examination demonstrated fibrotic sinus tracts involving the nipple–areolar complexes and surrounding periareolar tissue
- The inframammary fold remained unaffected, helping distinguish the condition from hidradenitis suppurativa
- The patient previously underwent multiple courses of antibiotics and incision and drainage procedures without sustained improvement
- Histopathologic evaluation demonstrated nonspecific chronic inflammatory changes without granulomatous disease

Methods

- Complete excision of diseased nipple–areolar complex (NAC) and associated fibrotic sinus tracts
- Central pedicle preservation to maintain vascular supply and breast projection
- Reconstruction incorporating principles of the batwing mastopexy technique for central breast excision
- 26 × 10 cm dermal flap deepithelialized to preserve dermal integrity
- Wise-pattern reduction closure performed to restore breast contour and symmetry
- Bilateral drains placed with layered closure to ensure perfusion and wound support

Results

Pre-Operative



Figure 1A: Preoperative lateral image demonstrating severe macromastia presented with recurrent draining abscesses of the breasts.



Figure 1B: Preoperative markings preserving the central pedicle to preserve breast projection

Immediately Post operative



Figure 2A: Wise pattern closure can be seen maintaining breast contour and symmetry



Figure 2B: Inferolateral view of closure and one of the bilateral surgical drains placed

Post Operative Wound Healing



Figure 3A: 1 week post operative healing demonstrating healing incisions with intact closure and no evidence of wound complication



Figure 3B: 4 weeks post operative demonstrating well healed incision with continued post operative recovery

Key Pearls

- Chronic subareolar abscesses represent a **structural inflammatory disease**, not simply infection.
- Sinus tract formation drives **high recurrence rates** following conservative treatment.
- Definitive cure requires **complete excision of diseased tissue**.
- **Reduction-pattern reconstruction** allows eradication of disease while preserving breast contour.
- **Central pedicle preservation maintains vascular reliability and projection.**

Results

- At four weeks postoperatively, the patient demonstrated appropriate wound healing without infection, dehiscence, or evidence of recurrent abscess formation.
- Complete eradication of fibrotic tracts and chronically infected tissue was achieved. Breast symmetry and contour were preserved, and overall aesthetic outcome was favorable.
- The procedure successfully addressed both functional disease burden and reconstructive goals.

Conclusion

Chronic subareolar abscesses often represent a structural inflammatory process rather than isolated infection, explaining high recurrence following limited interventions. Incorporating reconstructive breast reduction principles allows definitive excision of diseased tissue while maintaining breast aesthetics. Central pedicle preservation is critical for maintaining projection and vascular reliability. Reduction-pattern reconstruction may therefore serve as an effective curative strategy in complex inflammatory breast pathology.

References

1. Trop I, Dugas A, Davis J, et al. Breast abscesses: Evidence-based algorithms for diagnosis, management, and follow-up. *Radiographics*. 2011;31:1683-1699.
2. Ekland DA, Zeigler MG. Abscess in the nonlactating breast. *Arch Surg*. 1973;107(3):398-401.
3. Silverstein MJ. Batwing mastopexy lumpectomy technique. *Ann Surg Oncol*.