International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Sarika et al. Int J Reprod Contracept Obstet Gynecol. 2026 Aug;15(8):3337-3339
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: https://dx.doi.org/10.18203/2320-1770.ijrcog20262587

Case Report

Gestational gigantomastia with severe bilateral breast enlargement and ulceration successfully managed with conservative therapy: a case report

Sarika*, Archana Bamniya

Department of Obstetrics and Gynecology, RNT Medical College, Udaipur, Rajasthan, India

Received: 14 June 2026
Revised: 10 July 2026
Accepted: 14 July 2026

***Correspondence:**
Dr. Sarika,
E-mail: mylifehpdsk@gmail.com

ABSTRACT

Gestational gigantomastia is an extremely rare disorder characterized by rapid and excessive enlargement of the breasts during pregnancy, often resulting in pain, skin ulceration, functional disability, and psychological distress. Early diagnosis and multidisciplinary management are essential to prevent serious complications. A 29-year-old multiparous woman (P3L3) presented in the postpartum period with massive bilateral breast enlargement that began during the fourth month of pregnancy and progressed rapidly until delivery. She developed severe breast pain, erythema, neck and back discomfort, and a 4×6 cm ulcer over the right breast. Clinical examination revealed diffuse bilateral enlargement without palpable masses or axillary lymphadenopathy. Laboratory investigations, including serum prolactin, were within normal limits. Ultrasonography and MRI excluded malignancy and abscess formation, while FNAC suggested a benign breast condition. Gestational gigantomastia remains a rare but potentially debilitating condition. Conservative medical management can provide substantial clinical improvement and may delay or avoid surgical intervention in selected patients.

Keywords: Gestational gigantomastia, Pregnancy, Bromocriptine, Breast hypertrophy

INTRODUCTION

Gestational gigantomastia (GG) is a rare disorder characterized by rapid, diffuse, and disproportionate enlargement of one or both breasts during pregnancy, with an estimated incidence of approximately 1 in 100,000 pregnancies. Although its exact pathogenesis remains uncertain, hormonal hypersensitivity rather than hormone excess is believed to play a significant role. Patients may develop severe pain, ulceration, infection, postural deformity, and psychological distress. Management ranges from conservative therapy to definitive surgery depending on disease severity. We report a rare case of gestational gigantomastia successfully managed with medical treatment.[1]

CASE REPORT

A 29-year-old woman, gravida 3 para 3 (P3L3), presented on the second postpartum day with massive bilateral breast enlargement and severe breast pain. Breast enlargement had commenced during the fourth month of pregnancy and progressed rapidly throughout gestation, with accelerated growth during the final month.

The patient complained of pain, erythema, progressive heaviness, neck and back pain, and difficulty maintaining posture. An ulcer measuring approximately 4×6 cm developed over the right breast. There was no history of similar symptoms in previous pregnancies, breast trauma, hormonal medication use, or breast surgery.

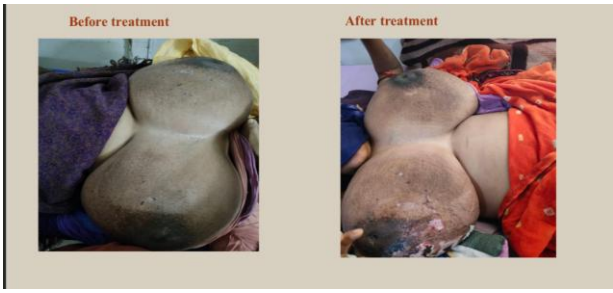

Figure 1: Gestational gigantimastia before and after treatment.

Past medical history was unremarkable for hypertension, diabetes mellitus, tuberculosis, asthma, epilepsy, or previous surgery. Family history revealed no similar breast disorders.

On examination, the patient weighed 78 kg and was hemodynamically stable. Both breasts were massively enlarged, with the right breast more affected than the left. Diffuse erythema and tenderness were present, with a superficial ulcer over the right breast. No nipple discharge, palpable masses, or axillary lymphadenopathy were detected.

Laboratory investigations including complete blood count, liver function tests, renal function tests, and serum prolactin were within normal limits. Fine needle aspiration cytology demonstrated benign breast pathology. Ultrasonography of the breasts showed inflammatory changes without focal masses or fluid collections. MRI findings were suggestive of mastitis without evidence of malignancy. Ultrasonography of the abdomen and pelvis demonstrated mild hepatosplenomegaly and pelvic ascites.

After excluding breast tumors, galactocele, pituitary pathology, ovarian pathology, and other endocrine causes, a diagnosis of gestational gigantomastia was established.

Management

The patient was managed conservatively with bromocriptine 2.5 mg twice daily, broad-spectrum antibiotics, analgesics, daily ulcer dressing and wound care, leuprolide depot injection (11.25 mg intramuscularly)

Following treatment, significant reduction in breast tension and erythema was observed, with gradual improvement in symptoms and local inflammation.

DISCUSSION

GG is an exceptionally rare benign disorder characterized by rapid, diffuse, and excessive enlargement of one or both breasts during pregnancy, with an estimated incidence of approximately 1 in 100,000 pregnancies. Although the exact etiology remains uncertain, current evidence suggests that the condition results from hypersensitivity of breast tissue to normal circulating levels of pregnancy-related hormones rather than hormonal excess itself. Estrogen, progesterone, prolactin, cortisol, and human placental lactogen have all been implicated in its pathogenesis, with prolactin appearing to play a central role in disease progression and response to medical therapy.[1,2]

Clinically, GG usually presents during the first or second trimester with rapidly progressive breast enlargement associated with pain, erythema, skin stretching, venous prominence, ulceration, and functional disability. Severe cases may lead to skin necrosis, secondary infection, hemorrhage, postural abnormalities, respiratory compromise, or even sepsis, significantly impairing maternal quality of life. In our patient, the disease manifested from the fourth month of pregnancy and progressed rapidly, resulting in massive bilateral breast enlargement, severe pain, neck and back discomfort, and a large ulcer over the right breast, reflecting the advanced spectrum of the disease.[3]

The diagnosis of gestational gigantomastia remains one of exclusion because several benign and malignant breast conditions may present with similar clinical findings. Differential diagnoses include inflammatory breast carcinoma, phyllodes tumor, giant fibroadenoma, galactocele, mastitis, lymphoma, and endocrine disorders such as pituitary or ovarian hormone-secreting tumors. Comprehensive evaluation using ultrasonography, magnetic resonance imaging, cytology or histopathology, and appropriate endocrine investigations is therefore essential before establishing the diagnosis. In the present case, normal serum prolactin levels, benign FNAC findings, absence of focal masses on imaging, and exclusion of pituitary and ovarian pathology supported the diagnosis of gestational gigantomastia.[4,7]

Management of GG remains controversial because of its rarity and the absence of standardized treatment guidelines. Conservative management is generally preferred during pregnancy and the early postpartum period, especially when maternal and fetal conditions are stable. Bromocriptine, a dopamine agonist that suppresses prolactin secretion, has been reported to reduce breast volume, relieve pain, and facilitate wound healing in several case reports, although complete regression is uncommon. Supportive measures including analgesics, antibiotics for secondary infection, meticulous wound care, and breast support are equally important. Our patient responded favorably to bromocriptine in combination with antibiotics, daily ulcer dressing, and leuprolide therapy, demonstrating significant reduction in breast tension and inflammation without requiring immediate surgical intervention.[6,8]

Surgical management is reserved for patients with refractory disease, recurrent episodes, or life-threatening complications such as uncontrolled hemorrhage, extensive

necrosis, or sepsis. The principal surgical options include reduction mammoplasty and total mastectomy. However, recurrence rates following reduction mammoplasty remain high in subsequent pregnancies, leading some authors to recommend bilateral mastectomy with reconstruction in women who have completed childbearing or have recurrent disease. Individualized treatment decisions should therefore consider future reproductive plans, severity of symptoms, and patient preferences.[3,5]

The present case highlights several important clinical lessons. First, gestational gigantomastia should be considered in pregnant women presenting with rapidly progressive bilateral breast enlargement after excluding malignant and endocrine causes. Second, severe presentations with ulceration do not necessarily mandate immediate surgery, as carefully selected patients may achieve substantial symptomatic improvement with conservative medical management. Finally, multidisciplinary collaboration involving obstetricians, surgeons, radiologists, pathologists, and endocrinologists is essential for optimal patient outcomes. Our experience adds to the limited literature supporting the role of bromocriptine-based therapy as an effective first-line treatment in severe gestational gigantomastia.

CONCLUSION

This case highlights the importance of recognizing gestational gigantomastia early and excluding malignant and endocrine causes. Conservative treatment with bromocriptine, supportive care, and multidisciplinary management can achieve favorable outcomes even in severe cases with ulceration. Individualized treatment planning is essential, with surgery reserved for patients who fail medical therapy or develop life-threatening complications.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Dancey A, Khan M, Dawson J, Peart F. Gigantomastia-a classification and review of the literature. J Plast Reconstr Aesthet Surg. 2008;61(5):493-502.
2. Fletcher MB, Laura M, Avashia YJ. Gestational gigantomastia: A case report and review of the literature. JAAD Case Rep. 2020;6(11):1159-161.
3. Swelstad MR, Swelstad BB, Rao VK, Gutowski KA. Management of gestational gigantomastia. Plast Reconstr Surg. 2006;118(4):840-8.
4. Dafydd H, Roehl KR, Phillips LG. Redefining gigantomastia. J Plast Reconstr Aesthet Surg. 2011;64(2):160-3.
5. Agarwal N, Kriplani A, Bhatla N. Gestational gigantomastia: A rare entity with successful medical management. Arch Gynecol Obstet. 2002;266(1):54-5.
6. Kupfer D, Dingman C, Broadwater G. Gestational gigantomastia: Successful treatment with bromocriptine and review of the literature. Obstet Gynecol Surv. 1996;51(11):695-700.
7. Wolfswinkel EM, Lemaine V, Weathers WM, et al. Hyperplastic breast anomalies in the female adolescent breast. Semin Plast Surg. 2013;27(1):49-55.
8. Ezem BU, Osuagwu CC. Gestational gigantomastia: A case report and review of management options. Niger J Clin Pract. 2010;13(3):353-6.

Cite this article as: Sarika, Bamniya A. Gestational gigantomastia with severe bilateral breast enlargement and ulceration successfully managed with conservative therapy: a case report. Int J Reprod Contracept Obstet Gynecol 2026;15:3337-9.