Gestational Gigantomastia: A Rarity

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ABSTRACT

Hypertrophy of the breast is a rare medical condition of breast connective tissue. It is listed as a ‘rare disease’ by the ‘Office of Rare Diseases’ of National Institute of Health (NIH). A woman aged 20 years presented to our antenatal clinic in her first pregnancy at 23 weeks of gestation with excessive enlargement of breasts since conception. Although its etiology has yet to be clarified, it has been associated with the response of breast receptors to gestational hormones. Gestational gigantomastia is a complication whose etiology and pathogenesis have yet to be fully clarified. However it has been speculated that placental hormones may trigger the condition.

Keywords: Fibroadenoma, Gestational gigantomastia, Phylloides tumor.


INTRODUCTION

Hypertrophy of the breast (macromastia and gigantomastia) is a rare medical condition of breast connective tissue. It is listed as a ‘rare disease’ by the ‘Office of rare diseases’ of National Institute of Health (NIH). Only 100 cases have been reported in the literature. It is also known as gravidic gigantomastia or mammary hyperplasia of pregnancy. It was first scientifically described in 1648 by Palmuth. It might be caused by increased histologic sensitivity to the female hormones. The underlying cause of the rapidly growing breast connective tissue, resulting in gigantic proportions, is thought to be a heightened sensitivity to prolactin, estrogen and progesterone; or an abnormally elevated hormones level in the blood or both. The effect of hormones can occur from the onset of pregnancy or between 16 and 20th week of gestation. The woman’s breast can result in extraordinary discomfort, turning feverish, red, itchy and even causing the skin to peel. The swelling can suppress the milk supply, pinching off the milk ducts and leading to mastitis.

The present case study describes a case of gestational gigantomastia seen at the Department of Obstetrics and Gynecology of the Rohilkhand Medical College and Hospital, Bareilly, Uttar Pradesh, in a primigravida in the second trimester of her pregnancy.

CASE REPORT

A woman aged 20 years presented to our antenatal clinic in her first pregnancy at 23 weeks of gestation with excessive enlargement of breasts since conception. After 1 month of conception, she started having complaint of chest pain which was prickling in nature for which she went to a local practitioner and he gave her painkillers (Fig. 1).

The excessive enlargement can cause muscular discomfort and ulceration of overlying skin.

Then at 3 months of gestational age, she went to a Government Hospital with same complaint and was given painkillers. At 6 months of gestational age when her problem increased she presented to our hospital. Her vitals were stable (Fig. 2).

On examination, the right breast had one ulcerated area. Both breasts had dilated veins and the weight of both breasts was about 3 kilograms. Length—25 cms and maximum circumference—20 cms approximately of both breasts.

There was no organomegaly. On per abdomen (P/A) examination—uterus was 26 weeks gestational size with cephalic presentation, liquor adequate, fetal heart sound (FHS) 142 bpm. Local examination—no abnormality detected (L/E—NAD), respiratory system/
cardiovascular system—no abnormality detected (RS/CVS—NAD).

Diagnosis of Gestational Gigantomastia complicated with infection, ulceration and anemia was made. The patient was admitted and managed by conservative treatment. We started antibiotics, daily dressing, hematins, analgesics, breast support was given and reduction mammoplasty has been advised to the patient after delivery.

**DISCUSSION**

Although its etiology has yet to be clarified, it has been associated with the response of breast receptors to gestational hormones. The estrogen receptor sensitivity to prolactin might have accounted for breast hypertrophy and enlargement. The exaggerated increase in breast volume occurs most commonly at the end of the first trimester of pregnancy coinciding with the period of peak gonadotropin production, thus giving strength to the hypothesis of a hormonal association, hormones, such as oestrogen, human chorionic gonadotropin (hCG), human placental lactogen (hPL) and prolactin. Phylloides tumor, fibroadenoma, non-Hodgkins lymphoma and lymphoblastic lymphoma are possible differential diagnoses, which can be excluded by biopsy.

**CONCLUSION**

Gestational gigantomastia is a complication whose etiology and pathogenesis have yet to be fully clarified; however, it has been speculated that placental hormones may trigger the condition. Typically, it may resolve itself without treatment after pregnancy ends, but few patients may require reduction mammoplasty.

**REFERENCES**