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Case Report

Gigantomastia of pregnancy

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ABSTRACT

A case of Gigantomastia during pregnancy in a 19-year-old female, gravida 1, following a full term gestation, with a total breast weight of 4.6 kg, complicated by infection and ulcerations was presented. Thorough laboratory analyses did not reveal any hint on the cause of this enormous breast enlargement. Gynecological examinations and ultrasound had revealed a viable, progressive normal fetus. The severity of the problem was further emphasized by the patients' complain of severe pain and strain in her social relations. Unilateral reduction mammoplasty was performed to prevent further complications. The procedure was completed without any complications or large amount of blood loss. Less than 100 cases of gravid gigantomastia have been reported. Etiology remains uncertain, and controversy exists in therapeutic modality. According to the literature the most reliable conservative treatment is bromocriptine therapy, but if the condition progresses surgical intervention, in the form of reduction mammoplasty or simple mastectomy, is the treatment of choice.

Key words: Pregnancy, Gigantomastia, Reduction mammoplasty

INTRODUCTION

Hypertrophy of the breast (macromastia and gigantomastia) is a rare medical condition of the breast connective tissues. The indication is a breast weight that exceeds approximately 3% of the total body weight.[1] There are varying definitions of what is considered to be excessive breast tissue, that is the expected breast tissue plus extraordinary breast tissue, ranging from as little as 0.6 kg (1.3 lb) up to 2.5 kg (5.5 lb) with most physicians defining macromastia as excessive tissue of over 1.5 kg (3.3 lb). Some resources distinguish between macromastia, where excessive tissue is less than 2.5 kg, and gigantomastia, where excessive tissue is more than 2.5 kg.[2] The enlargement can cause muscular discomfort and over-stretching of the skin envelope, which can lead in some cases to ulceration.[3] Hypertrophy of the breast tissues might be caused by increased histologic sensitivity to the female hormones prolactin, estrogen, and progesterone; or an abnormally elevated hormone(s) level in the blood, or both.[4] Breast hypertrophy is a benign *progressive* enlargement, which can occur in both breasts (bilateral) or only in one breast (unilateral).

CASE HISTORY

A 19-year-old female patient had presented to us with complaint of swelling in the left breast for past 1 year and pain for past 4 months. Swelling was insidious on onset, progressively increased in size, with history of rapid increase in size. Pain was dull, aching in nature, localized to left breast. She was gravida 1 with no other conception in the past. She delivered a full term baby with the entire length of gestation being otherwise unremarkable. Left breast engorgement started developing after 4 weeks of pregnancy. The engorgement had rapidly increased in the third trimester of pregnancy and continued postpartum. After 1 month of a normal delivery she had presented with fever, pain in left breast and milky discharge from nipple. She was treated conservatively with antibiotics and with analgesics and was discharged with advice to take bromocriptine. Her swelling had continued to progress to the present state. There was no history of any co-morbidity. No other significant medical or surgical history.

On examination breast was diffusely enlarged, with no active discharge, healed ulcerative changes in upper inner quadrant of breast, no definite lump palpable, non-tender breast with normal temperature, weight around 4.6 kg and systemic examination was within normal limits (Figure 1).

A reduction mammoplasty was planned in association with the Department of Plastic Surgery. Preoperatively skin markings were made. Routine hematological investigations were within normal limits. USG of breast showed lump

Figure 1: Left breast preoperatively

in left breast with no sizeable collection. FNAC-milk was aspirated admixed with epithelial cells. A reduction mammoplasty was then performed. Post-operatively she developed mild seroma at the site of intervention which was gently drained with dressing. Her post-operative recovery was otherwise unremarkable. Specimen sent for histopathological examination showed infiltration of inflammatory cells with extensive areas of infarction. No epitheloid cells or malignant change present (Figures 2–7).

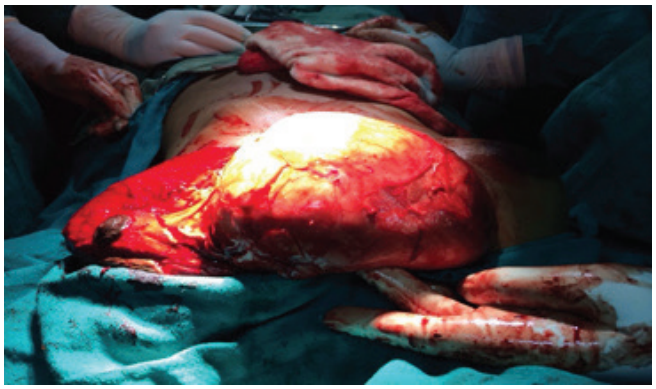

Figure 2: Intra-operatively

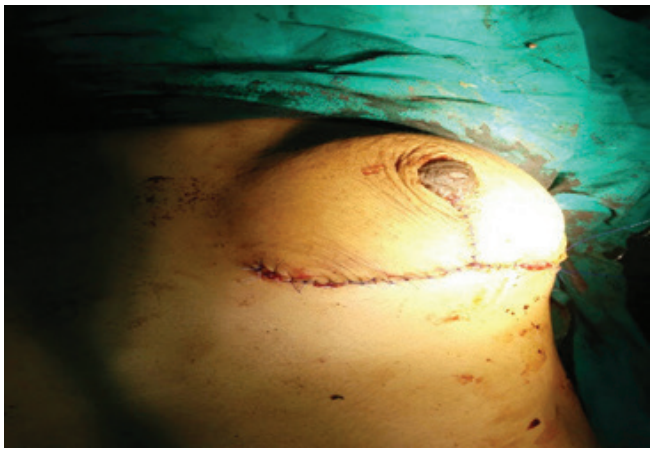

Figure 3: Immediate post-operatively

Figure 4: Specimen

Figure 5: Post-operatively—day 3

Figure 6: Post-operatively—day 6

Figure 7: Post-operatively—day 14

CONCLUSION

This fortunately rare condition is particularly important in developing countries as it prevents breast feeding, which is crucial for the development of the infant, and prevents effective contact between mother and baby, thus making bonding difficult. Also in country like ours patients suffering from this disease have poor social acceptance. Prolonged follow-up may not be desirable for a minority of these patients. Awareness of this seemingly benign condition would lead to a better quality of life for those few patients suffering from this disease.[5]

REFERENCES

1. Agrawal N, Kriplani A, Gupta A and Bhatla N. Management of gigantomastia complicating pregnancy. A case report. J Reprod Med 2002;47;871–874.
2. Greely PW, Robertson LE and Curtin JW. Mastoplasty for bilateral benign breast hypertrophy associated with pregnancy. Ann Surg 1965;162:1081–1083.
3. Dancey A, Khan M, Dawson J and Peart F. Gigantomastia—a classification and review of the literature. J Plast Reconstr Aesthet Surg 2008; 61:493–502.
4. Boyce SW, Hoffman Jr PG and Mathes SJ. Recurrent macromastia after subcutaneous mastectomy. Ann Plast Surg 1984;13:511–518.
5. Swelstad MR, Swelstad BB, Rao VK and Gutowski KA. Management of gestational gigantomastia. Plast Reconstr Surg 2006;118:840–848.

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