

# Gigantomastia and mastitis in pregnancy- A case report

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## Introduction

Gigantomastia is a rare condition characterized by excessive breast growth and has no determined etiology but it is thought to be due to excessive physiological levels of hormones or increased sensitivity of the breast tissue<sup>2</sup>.

It is disabling both physically and psychologically, one would argue more so during pregnancy and can be treated conservatively, medically or surgically. Improvement is usually seen after delivery. We report a case of a 39-year-old woman with persistent gigantomastia

## Case

A 39-year-old woman presented with history of breast enlargement in pregnancy. In her medical history she suffered from Grave's diseases and SLE. In the past, after a salpingectomy for an ectopic pregnancy she had noted a gradual increase in size of her breast which increased from size C to size E. She also had bilateral breast fibroadenomas removed in 2010.

It was during this pregnancy that she found increase in the size of her breast and they increased at such a rate that she found herself changing bra size every three weeks. She suffered with chronic pain in both breasts due to the weight and also lower back pain. (Pictures 1-4). She had been started on bromocriptine at 30 weeks gestation and stopped before labour. She was delivered by Caesarean Section at 34 weeks due to IUGR and Oligohydramnios.

Postnatally she is wearing size N bra, which is too small for her, and her breast reaches her waist line. She has suffered two episodes of mastitis post delivery and is currently under the endocrinologist and breast surgeons. She is on the waiting list for reduction mammoplasty.



## Discussion

The incidence of pregnancy induced gigantomastia is between 1 in 28000 to 100000 pregnancies<sup>2</sup>. Although a benign condition, gestational gigantomastia is especially crippling to the pregnant woman. There are many causes, which include marked hormonal changes such as during puberty and pregnancy. It has also been reported in people with an autoimmune disease<sup>3</sup>.

### Aetiology

#### Idiopathic and Hormones

Majority of patients presenting with this have no obvious precipitating cause but various authors report endogenous hormone stimulation and hypersensitivity of the breast tissue to these circulating hormones. Since this condition is seen at the time of puberty and pregnancy the majority of reports theoretically support the hormone theory<sup>2</sup>.

#### Drug induced

Medications like penicillamine<sup>9</sup>, neohetazone<sup>10</sup> and cyclosporine<sup>11</sup> have been implicated to be the cause but mechanism of action remains unclear.

#### Autoimmune

Touraine et al in their published series concluded that breast tissue was the target for autoimmune diseases although the precise mechanism was not known.

As of yet, there still remains to be a universally accepted classification system for gigantomastia and thus there is no concrete diagnostic or treatment threshold in terms of weight or size. Most definitions refer to a particular weight of breast tissue.

Dafydd et al (2010) have proposed a new definition with the breast tissue contributing to more than 3% of the patient's total body weight.

Anne Dancey et al(2006) have proposed a new classification for Gigantomastia

Medical therapies to manage gestational gigantomastia are inconsistent in outcome and only few patients respond<sup>5</sup>. Conservative management consisting of rest, support and analgesia are only valuable for a certain time and most women with persistent gigantomastia choose to undergo reduction mammoplasty after delivery. One must however, take future pregnancies into consideration.

### Treatment

#### Hormonal therapy:

Multiple hormonal therapy has been used with varied success. Drugs used include bromocriptine<sup>6</sup>, medroxyprogesterone<sup>6</sup>, tamoxifen<sup>7</sup> and danazole<sup>8</sup>.

#### Surgery

Reduction mammoplasty, this are used as the first line of treatment with or without hormonal therapy<sup>2</sup>.

Mastectomy-often done following reduction mammoplasty and avoids the use of prolonged hormone therapy<sup>2</sup>.

#### Declaration of interest:

No conflicts of interest.

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