

## Gigantic Polymastia Case Report and Literature Review

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### ABSTRACT

Polymastia or supernumerary breast tissue was once thought to be a symbol of fertility and femininity in ancient Greek. A nulliparous 49 years old lady was presented to us with a rare gigantic polymastia. The two normally positioned breast were very huge, also another two axillary breasts. The patient went through the routine pre-operative evaluation then was ready for surgery.

Excision of the two axillary breasts were done first. Then amputative reduction mammoplasty with free areola and nipple graft was done to the normally positioned breasts.

The post operative period was uneventful and the patient went home very happy with the normally sized breasts with a change in her spirit and a change of the vision for her life.

### INTRODUCTION

Polymastia or supernumerary breast tissue was once thought to be a symbol of fertility and femininity and the ancient Greek goddesses of fertility were depicted with row upon row of breasts on their chests [1]. It is a common congenital anomaly presenting usually along the embryonic milk line extending between the axilla and the groin [2,3,4]. Other sites documented include the face and vulva [2,4].

Diffuse hypertrophy of the breast occurs sporadically in otherwise healthy girls at puberty and occasionally during the first pregnancy [5]. The breasts attain enormous dimensions. Massive enlargement in elderly nulliparous women who did not have the problem at puberty is rare.

A rare case of gigantic polymastia in a nulliparous elderly (49 years) woman is presented. She developed progressive enlargement of both breasts and bilateral axillary mammary tissue starting at the age of 40 years.

This report is based on a rare presentation in time and proportions (32 kg. of excised breast tissue) of gigantic polymastia in a 49 year old nulliparous woman.

### CASE PRESENTATION

A 49 year old woman was referred from a district hospital to the Moi Teaching and Referral Hospital (MTRH) with complaints of massively enlarged masses in both axillae and similarly enlarged breasts for nine years. The breast enlargement had been progressive resulting in massive proportions and weight.

They extended to the thighs just above the knees. She had to support herself on a walking stick while in an upright position on account of weight. Initially there was no pain localised to the breasts and axillary masses but had considerable discomfort in the upper part of the body.

She could not find suitable clothing and her movements were severely restricted - between the house and pit latrine in the compound.

These factors and superstition (believing that she had been bewitched) kept her out of public sight and the number of visitors to her home progressively diminished. Recurrent ulcers formed at the dependent parts discharging clear fluid. The areas of ulceration were associated with pain.

She was nulliparous. Menarche was at age of 16 years and menstrual cycle had been regular. However, at the time the swellings began the menstrual cycle became irregular. Menstrual flow had stopped a year earlier by the time of admission. There was no family history of similar problem. She was the second wife in a polygamous marriage where she had been expected to bear children as

the first wife had only 2 but this was not to be. The unfulfilled expectation coupled with the “strange illness” fuelled the superstitions. It took the intervention of her Catholic Parish Priest to get her into hospital.

On examination, she was moderately pale, weighed 96 kg and was in good nutritional status. Pulse 94/min regular, BP 140/90 mmHg, respiratory rate of 20/min and temperature of 36.4°C. Systemic examination revealed normal functions. Both breasts and axillary masses were diffusely enlarged and ptotic dangling below the waistline.

The areola and nipples were stretched and the skin at the dependent parts was oedematous with ulceration and scars of the left breast and right axillary mass, but scars on the right breast and left axillary mass. The axillary masses did not have the areola or nipples. The breasts and masses were firm and nodular. Tenderness surrounded the regions of ulceration.

Liver and renal functions were normal. Full blood count showed haemoglobin of 8.3 g/dl. Assay of prolactin, luteinizing hormone and follicle stimulating hormone were all within normal post-menopausal ranges. Abdominal ultra sound scan was normal.

The patient was transfused two units of blood, topping up the haemoglobin to 11.9 g/dl. Surgical procedure involved excision of accessory breasts and reduction mammoplasty by amputation of pectorally located breasts during the same general anaesthesia. Nipple and areola were harvested and grafted on each reduced breast. Incisions were closed over drains, one in each axilla, that were removed after 48 hrs. Prophylactic antibiotics were given and the patient was transfused 2 units of blood to compensate for the unavoidable loss during the removal of the huge amount of the tissue. Total mass of breast tissue excised was 32 kgs. Leaving enough to fit into the cup of a large brassier. The surgical incisions healed well and all sutures were removed on day 10 of the surgery. The patient was discharged on day 15 through the clinic where regular follow-up was maintained for 1<sup>1</sup>/<sub>2</sub> yrs. No untoward problems were encountered and no recurrence noted during this time.

### HISTOLOGY REPORT

Tissues were taken from various places of all the four enlarged breast masses. No adipose tissue was noted but evidence of oedema and abundant connective tissue. Sections showed places of fibrous hyalinization with focal infiltration with lympho-

cytes and plasma cells. Few glandular structures were present lined with cuboidal epithelium without evidence of atypia.



Photo (1): Antero-posterior photo, the patient needed support because of the heavy weight of her breasts.

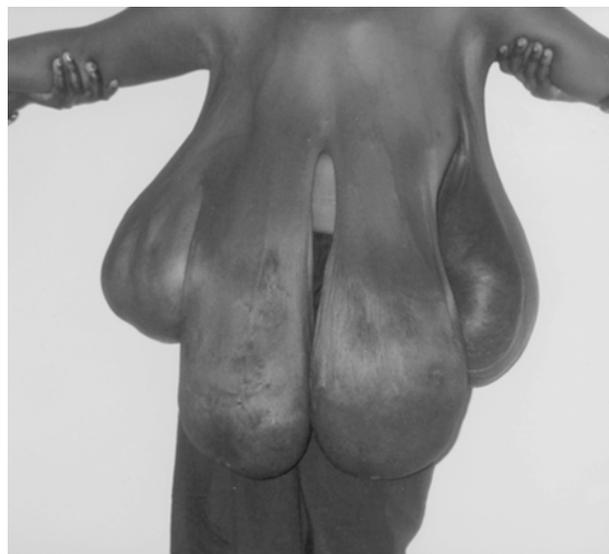


Photo (2): A close up view to show the very huge breasts.



Photo (3): Post operative antero-posterior view, showing areas of hypo-pigmentations in the areola and nipple.



Photo (4): The patient going home without support, with a traditional ceremony.

## DISCUSSION

Breast anomalies have a significant negative impact on women's health status, self image, confidence and overall quality of life [6].

Realization that huge breasts cause pain in the upper part of the body has helped emphasize the view that reduction mammoplasty is not only a cosmetic but a functional surgical procedure, with immense health benefits [7]. Other than the pain, problems associated with massive size of the breasts are; difficulty in finding suitable clothing, uncomfortable feeling in the body image and sexual relationships. Our patient was cut off from public life on account of massive weight, had no suitable clothing, superstition and eventual stigmatisation. This was explained away as a case of witchcraft.

A certain degree of excessive enlargement of the breasts is within physiological limits as in the obese habitus. Cases of hypertrophy, ptosis or a combination of these are common [8]. Prolonged breast feeding is considered to be an association in the occurrence. Because of this, the breast is only considered abnormal and parted with on account of practical uselessness coupled with physical inconvenience and gross deformity, that embarrasses and handicaps one's activities [8]. Our patient was severely handicapped and shunned. Massive mammary hypertrophy is, however, an uncommon condition.

The overgrowth of tissues is due to extreme hypersensitivity of the mammary glands to oestrogenic hormone [5], as shown by the relationship of hypertrophic process to menarche, pregnancy and lactation, conditions in which ovaries are highly active.

In some cases pregnancy and lactation have been noted to have an inconstant influence. The breasts may become greatly enlarged during successive pregnancies, to diminish in size during lactation. The clinical significance of breast anomalies includes their susceptibility to inflammatory and neoplastic changes and their association with other congenital anomalies of the urinary and cardiovascular systems [2]. There is hence need for proper evaluation of patients and regular follow-up. Unilateral macromastia should be distinguished from lymphoedema large lipoma or other tumour in the retromammary space pushing the breast forward [5].

A constant finding in the microscopic evaluation is scantiness or almost complete disappearance of normal lobular units [9]. The enlarged breasts consist primarily of fat and fibrous tissue while the glandular tissue elements remain quite small.

The amount of fat (up to 61%) is influenced more by the body mass index (BMI) of the patient [9]. Weight reduction and liposuction have been employed in the management of macromastia due to high fat content. A third of our patient's weight on admission was composed of breast tissue that was eventually removed. She was a lean person and the breasts did not have fat. Lymphocytic infiltration occurs and in the later stages, hyalinization of connective tissues is found. Localized fibroadenoma may occur.

Non surgical measures including weight reduction, physical therapy, specialised brassieres and medications are not effective in providing long term relief of breast related symptoms [6].

Symptomatic macromastia like in our patient of course invalidates ones ability to engage in weight reduction exercise programme. Reduction mammoplasty is superior and achieves satisfactory results [7]. In some areas such as intimate situations, femininity and social activities, the results have been shown to exceed pre-operative expectations. Reduction has also been shown to improve pulmonary parameters related to work of breathing- Inspiratory capacity, maximal voluntary ventilation and peak expiratory flow rate [10].

Despite complications of mammoplasty- nipple areola loss, bleeding, infection, asymmetry of breasts and scarring, these women are generally among the most satisfied and appreciative of patients.

Our patient walked out of the ward a happy and confident woman, joining nurses in farewell

song and dance. There was more song and dance as the whole community at home celebrated her home coming. It is gratifying to note that the whole country called to the support of this patient and contributed generously towards her treatment. This was highest demonstration of existing goodwill at individual and community level and readiness to participate in health provision. In appreciation, she has volunteered to work for free in the Kindergarten started in a plot she donated and has adopted a needy girl.

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