Management of Gigantomastia: A Review of Two Cases

Amal Jalal, Asmaa Chfiri, Sara Karti, Zakaria Ahmed Jaafari, Mehdi Alaoui, Amine El Harti, and Mounia Diouri

ABSTRACT

Gigantomastia is a rare mastopathy of unknown cause. It affects mostly young women at the time of puberty and is often manifested by a bilateral increase in breast size. Hormone levels are usually normal and the breast biopsy shows an increase in mesenchymal tissue. The mechanical and psychological complications related to the excessive weight and volume of the breasts impose a rapid and effective surgical treatment whose goal is to obtain physical and psychological results rarely equaled in conventional medicine. Therefore contributes to a complete state of physical, mental and social well-being to patients. We will report two cases of juvenile gigantomastia; discuss the therapeutic possibilities and the prognosis.

Keywords: Hypertrophy, mammary gland, prognosis, puberty, treatment.

I. INTRODUCTION

Gigantomastia is a rare benign condition that usually affects young women during puberty and has an unknown etiology, for which a hypersensitivity to sex hormones is suggested. It is unsightly. However, very often, it is the pain, the disorders of the spinal statics and the scapular belt, as well as the psychological repercussions, which lead the patients to formulate a request for reconstructive and aesthetic surgery. The aim is to report two cases of juvenile gigantomastia; discuss the therapeutic possibilities as well as the prognosis.

II. CASE REPORT

A. Case 1

A Miss K.M, 25 years old, menarche at the age of 14 years, who presents since 9 years a progressive increase of the volume of the breasts without associated nipple discharge.

Moreover, the patient presents permanent back pain with an attitude of shoulder leaning forward constituting a functional and psychic hindrance (patient is afraid to undress in front of someone). The clinical examination objectives an asymmetrical increase in the size of the two breasts; the left breast more developed than the contralateral one with the presence of a hypoesthesia of the nipple-areolar plate and a deviation of the axis of the breasts (Fig. 1). The distance between the sternal fork and the nipple is 25 on the left and 24 on the right.

The breast ultrasound did not show any intra mammary cystic or tissue nodule. The hormonal dosage of estrogen and prolactin is normal. The patient underwent a breast reduction (inverted T technique). The surgical procedure was performed with general anesthesia, in a half-sitting position, with the arms at her side. It lasts about 3 hours. A Redon drain

Fig. 1. Pre-operative photos.
The breast ultrasound did not show any intra mammary cystic or tissue nodule. The hormonal dosage of estrogen and prolactin is normal. The patient underwent a breast reduction (Mc Kissok vertical pedicle breast reduction technique). The procedure was performed under general anesthesia, in a half-sitting position with the arms at the side of the body. It lasts about 4 hours. Drainage with a Redon drain and a pressure dressing were applied at the end of the procedure. The duration of hospitalization was 5 days. A sports bra made of elastic fabric was prescribed, to be worn day and night for 6 weeks after the operation (bra without underwire, opening from the front if possible). The histology of the operative parts was in favor of a fibrocystic breast dystrophy. The immediate postoperative result was judged satisfactory by the patient (Fig. 2). The evolution after a 24-month follow-up was favorable.

Fig. 2. Photos at D5 post-operative.

B. Case 2

A Miss G.M, 23 years old, phototype IV, divorced, menarchal at the age of 12, with a BMI of 36 and who has been presenting for 11 years with a progressive increase in breast volume without associated nipple discharge.

In addition, the patient presented with permanent back pain with a forward leaning shoulder attitude. The clinical examination showed an asymmetric increase in the size of both breasts; the left breast was more developed than the contralateral breast with preservation of the sensitivity of the areola-nipple plate and a deviation of the axis of the breasts (Fig. 3). The distance between the sternal fork and the nipple is 34 on the left and 33 on the right.

Fig. 3. Pre-operative photos.

The diagnosis of gigantomastia is clinical. Imaging is of no interest except for monitoring. There is no standard therapeutic approach to gigantomastia given the small number of cases reported in the literature. The majority of authors propose hormone therapy as the first-line treatment for gigantomastia gravid arum [3]-[6]. Tamoxifen reported to be useful in preventing recurrence after reduction mammoplasty. Corticosteroids and diuretics can be used with caution [7]. In case of non-response to medical treatment, surgery is required before necrosis sets in.

The imperative of breast reduction surgery are reduction of breast volume, repositioning and viability of the nipple-areolar plate, the most discreet skin scars possible, and a harmonious and stable shape, adapted to the patient's morphology and desires. Breast reduction surgery (BRP) is now a common surgical procedure in cases of juvenile gigantomastia, motivated by essentially functional, psychological and/or aesthetic reasons. It is a surgery most often performed from the age of 15-16 years to allow the breasts to complete their maturation [6], [8] and the

and a compression bandage were applied at the end of the procedure. The duration of hospitalization was 2 days. A sports bra made of elastic fabric was prescribe, to be worn day and night for 6 weeks after the operation (bra without underwire, opening from the front if possible). The histology of the operative parts was in favor of a fibrocystic breast dystrophy. The immediate postoperative result was judged satisfactory by the patient (Fig. 2). The evolution after a 24-month follow-up was favorable. Satisfaction with the shape, volume and symmetry of the reconstructed breasts was good. The psychological impact was favorable (Fig. 5).

Fig. 4. Photos at 9 months post-.

Fig. 5. Photos at D1 post op after the surgical recovery

III. DISCUSSION

Breasts, whose volume exceeds 1500 cm³, the norms usually varying from 200 to 350 cm³, define Gigantomastia. It is characterized by diffuse, rapid and excessive breast enlargement [1]-[2]. It most often occurs at puberty or during pregnancy, but is sometimes of iatrogenic, autoimmune or idiopathic origin. The breast is voluminous, firm, painless, and inflammatory in appearance, with skin maceration at the level of the submammary fold, responsible for real infectious lesions. This breast hypertrophy is the cause of real psychological distress and great physical discomfort. It often causes postural changes due to the excess weight forward that the patient adopts, more or less consciously, in order to conceal her breasts with a dorsal kyphosis position, shoulders projected forward. These conditioned attitudes may persist even after the operation.

The diagnosis of gigantomastia is clinical. Imaging is of no interest except for monitoring. There is no standard therapeutic approach to gigantomastia given the small number of cases reported in the literature. The majority of authors propose hormone therapy as the first-line treatment for gigantomastia gravid arum [3]-[6]. Tamoxifen reported to be useful in preventing recurrence after reduction mammoplasty. Corticosteroids and diuretics can be used with caution [7]. In case of non-response to medical treatment, surgery is required before necrosis sets in.

The imperative of breast reduction surgery are reduction of breast volume, repositioning and viability of the nipple-areolar plate, the most discreet skin scars possible, and a harmonious and stable shape, adapted to the patient's morphology and desires. Breast reduction surgery (BRP) is now a common surgical procedure in cases of juvenile gigantomastia, motivated by essentially functional, psychological and/or aesthetic reasons. It is a surgery most often performed from the age of 15-16 years to allow the breasts to complete their maturation [6], [8] and the
mechanical qualities of the skin are better, while taking into account the functional character of the breasts (breastfeeding). Few articles were published on both the management of juvenile breast enlargement and on the possibilities of breastfeeding after PMR [7], [9]-[10]. The most commonly used techniques are the Thorek reduction, the Mc Kissock technique, or the inverted these last two techniques were used in our two patients.

The advantages of these techniques are: shorter hospitalization and postoperative care; no permanent hypoesthesia of the PAM, even if it exists transiently; no discoloration of the PAM; preservation of the contractility of the PAM; greater durability of the morphological results over time. In addition, these techniques do not require a longer intervention time and do not give a higher rate of cytostéatonécrosis [11].

After the operation, a two-year delay must be was respected before considering a pregnancy. Bilateral mammograms and/or breast ultrasound are necessary for women over 35 years of age, or for women with a particular personal and/or family history. In all cases, it is recommended that a mammogram be performed a few months after the procedure to serve as a reference for subsequent breast monitoring.

IV. CONCLUSION

Gigantomastia is a volume anomaly of the breasts, of unknown causes. Plastic surgery provides comfort to the patients who wear them. The appearance of conservative techniques based on the transposition of the MAP with conservation of the nipple pedicle, and the superior quality of their results. Long-term follow-up is necessary because of the high risk of recurrence.

CONFLICT OF INTEREST

Authors declare that they do not have any conflict of interest.

REFERENCES


