PROLONGED GESTATIONAL GIGANTOMASTIA - LITERATURE REVIEW AND CASE REPORT

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ABSTRACT

Breast hypertrophy or gigantomastia is a rare condition with few reports in the literature, limiting the search for references on the subject. Of the various conditions that can lead to excessive breast enlargement, during pregnancy it may be related to the exaggerated response of breast receptors to pregnancy hormones. Due to the few reports, there is no established epidemiology, therefore without a standard. Symptoms range from pain to breast necrosis and even skeletal and muscle impairment. The authors report a prolonged gestational gynecomastia and late treatment with good evolution after reduction mammoplasty.

KEYWORDS: GESTATIONAL BREAST HYPERTROPHY. GIGANTOMASTIA. BENIGN BREAST

INTRODUCTION

Breast hypertrophy or gigantomastia is a rare condition that consists of excessive and disproportionate enlargement of the single or bilateral breast. It can occur during adolescence, in the pregnancy-puerperal cycle or drug-induced. Juvenile gigantomastia occurs between 11-19 years, of family character, and it is related to hormonal disorder and a marked response of estrogen receptors. In these cases, some authors recommend treatment with anti-estrogenic drugs in the postoperative period after a reduction mammoplasty, but without proven success [1].

It is believed that Tamoxifen 10-20 mg may have good results in this situation. When induced by drugs, it can occur in any age group and it originates from the use of drugs already known as: indinavir, d-penicillamine and cyclosporins. The conduct is to stop using the medication and assess the need for surgical treatment [2].

Gestational hypertrophy is more rare than juvenile with an estimated case for every 28,000-118,000 pregnancies, it occurs during the gestational period and the puerperium with a breast enlargement of 10 to 20 times, when the normal enlargement in the pregnancy period is approximately twice the usual size. Its etiology is unknown, but it has been associated with hormonal changes that occur during this period [3].

The exaggerated enlargement of the breasts leads to distension of the skin and parenchyma that culminate in areas of ischemia, necrosis, infections and hemorrhages. In addition, there are other disorders such as neck pain, difficulty to walk, balance and even breathe.

It is more common in the first pregnancy and there is a high chance of recurrence in subsequent pregnancies. Its diagnosis is clinical and often retrospective. Imaging exams show an overall enlargement of the breast parenchyma. Differential diagnosis should be made with malignant breast neoplasms and fibroepithelial tumors [4].

CASE REPORT

FFR, black, 40 years old, G4P1n2c A0, healthy and without addictions; she came to the mastology outpatient clinic in March 2020 in Goiânia-GO, referring to excessive breast enlargement during the last pregnancy 4 years ago. There was no case in previous pregnancies.

She exclusively breastfed for 6 months and, after stopping breastfeeding, she presented sporadic episo-

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des of galactorrhea. Patient reported partial regression of breast volume during the puerperium. Patient started investigation of breast hypertrophy when symptoms appeared but was unable to follow up. Patient reported pain, altered physical posture and psychosocial impairment.

At the time of consultation, the breasts were grossly symmetrical, bulky, and pendulous, without bulging or visible retractions, mainly periareolar bilateral streaks (FIGURE 1). There was no lymph node enlargement. Swollen breasts, with the possibility of palpation of tumors in both breasts suggesting galactocele. Negative nipple expression without trigger points.

During clinical investigation, she presented spontaneous drainage of a galactocele in the right breast, leading to partial volume reduction. After imaging tests and subsequent assessments of disease progression, 1 mg/week cabergoline was prescribed. Two doses were performed and then submitted to a reduction mammoplasty with implantation of the nipple-areola complex with good response and evolution. (FIGURE 2)

Figure 1. 40-year-old patient with bilateral breast hypertrophy during the last pregnancy and puerperium.

Figure 2. Aesthetic result after 30 days of bilateral reduction mammoplasty with implantation of nipple-areolo complex.

DISCUSSION

Gestational breast hypertrophy or gigantomastia is a rare condition that can have a major impact on a woman's life. It is believed that there is hypersensitivity of the breast tissues or excessive increase in hormones leading to glandular hyperstimulation. The increase in hormones can affect fetal development and cause neonatal gynecomastia, with no obstetric indication for early termination of pregnancy [5].

The patient affected by this pathology usually complains of mastalgia, respiratory distress in the supine position, low back pain and neck pain in addition to, in more advanced cases, ulcerations and infection of the breasts. Upon examination, the breasts are swollen, with venous congestion and possible skin ulcerations and cellulite. Patients are also shown to be psychologically committed to depression and social isolation [6].

There are no known protective factors and conservative treatment is not yet effective. The regression of the breast volume in the puerperium is mostly partial and, therefore, early treatment is indicated. Reduction mammoplasty is still the most effective way to resolve the disease and has an immediate impact on the patient's quality of life.

Non-surgical treatment includes Cabergoline 0.5 mg, twice a week, which is a dopamine agonist, which inhibits lactogenesis, decreasing pain and glandular swelling. Bromocriptine (dose 5-7.5 mg/day) can also be used, a partial dopamine agonist, but less accessible and with more adverse effects. Common analgesics are associated with pain relief. In cases of necrosis or ulceration, collagen or hydrocolloid plaques can be applied [7].

The elevation of the breasts mechanically, with bras or breast supports, reduces the effect caused by weight. The conservative way in the management of the disease is not the most indicated since, even though the breasts have high chances of reducing the volume after pregnancy, there is no total reduction and still presents great chances of recurrences in future pregnancies.

FINAL CONSIDERATIONS

Surgical treatment can be performed in association with conservative therapy or alone. Reduction mammoplasty is the technique of choice, preserving aesthetics, sensitivity, contour, pigmentation and nipple erection. Mastectomy should be indicated in extreme cases, with large volumes, associated with extensive areas of necrosis.

In the reported case, treatment with cabergoline associated with reduction mammoplasty was performed with implantation of the nipple-areolo complex obtaining good surgical response and adequate evolution.

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