

Bilateral Gravidic Gigantomastia at the Gynecological and Obstetrical Clinic of Dantec: A Case Report

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Abstract

The consequence of a monstrous and diffuse evolution of the usual epithelial hyperplasia of pregnancy, gravidic gigantomastia is a disabling pathology. Rarely, it poses a problem for management and its etiology is still undetermined. In spite of a benign condition, it is nonetheless a serious one because of the complications associated with excessive growth, the weight of the mammary gland and the compromise of breastfeeding function (through destruction of the nipple-areolar plate and surgery). We report a case of bilateral gravidic gigantomastia in a 31-year-old woman to discuss the diagnostic and therapeutic aspects.

Keywords

Gigantomastia, Pregnancy, Breast Volume, Hypertrophy, Mastectomy, Black Woman, Macromastia, Gravidic

1. Introduction

The breast is linked to the image of the woman, of motherhood, and any deformation or disease has both physical and psychological repercussions. Gestational gigantomastia, a rare and poorly understood pathology, whose incidence is estimated at around 1 per 100,000 births, is nonetheless disabling [1] with permanent bed rest, painful ulcerations, skin necrosis, and hemorrhages. It can be life-threatening due to septic shock. Caucasian women seem to be more affected

than African-American women [1] [2].

This pathology appears most often in the first half of pregnancy [3]. Few cases have been reported in black women. Its etiopathogeny remains poorly elucidated and is thought to be related to hormonal phenomena in ill-defined mastopathy terrains [1]. Gestational gigantomastia poses a problem for therapeutic management. Medical, surgical, and obstetric treatments have been instituted on a case-by-case basis [1] [3] [4].

Gestational gigantomastia is a rare and mostly unknown entity.

We report a rare case of bilateral gravidic gigantomastia in order to discuss the diagnostic and prognostic aspects and etiopathogenic problems in black women. The compromise of the breastfeeding function is related either to the pathology itself or to the surgical technique used.

2. Patient and Observation

This is a 31-year-old black female patient, fourth gesture with 3 healthy living children and no particular pathological history. Pregnant at 25 weeks of amenorrhea, she was seen for bilateral and painful breast enlargement that appeared during the first trimester of pregnancy.

On admission, we found: a blood pressure of 100/70 mm Hg, a tachycardia of 120 beats per minute, a temperature of 36°5, a weight of 70 kilograms for a height of 157 cm (body mass index equal to 28.5 kg/m²).

The breasts are voluminous, rounded with a shiny pitted skin, ulcerated and budding zones. They measured 37 cm in length by 34 cm at the base for the right breast and 34 cm by 33 cm at the base for the left breast (**Figure 1**). The obstetrical examination was unremarkable.

The haemogram showed an anaemia of 8.7 g/dl microcytic, leukocytes of 12 G/l (normal value during pregnancy) and a normal platelet count.

On breast ultrasound, the right breast showed significant thickening of the infiltrated breast connective tissue with hyper vascularization and fibroglandular collection and on the left breast there was significant thickening of the glandular breast connective tissue.

Pathological examination after microbiopsy showed bilateral fibrocystic mastopathy (**Figure 2**).

The obstetrical ultrasound scan showed an evolving intrauterine monofetal pregnancy whose biometry corresponded to 25 weeks of amenorrhea.

We then instituted a treatment protocol based on local antiseptic care, cabergoline 0.5 mg per week, a level 2 analgesic and martial supplementation.

After 10 days of treatment we noted a worsening of her condition with a systemic inflammatory response syndrome, bilateral mammary fleshy budding (**Figure 3**), necrosis, abscessation, anemia at 7 g/dl and a biological inflammatory syndrome. She then received broad-spectrum probabilistic antibiotic therapy in addition to the treatment received above and a decision was made to terminate the pregnancy.

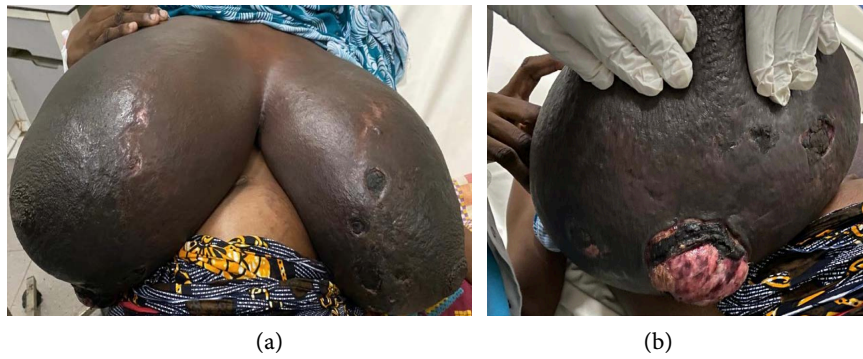


Figure 1. Aspect of the breasts at admission. (a): both breasts; (b): lower quadrants of the right breast.

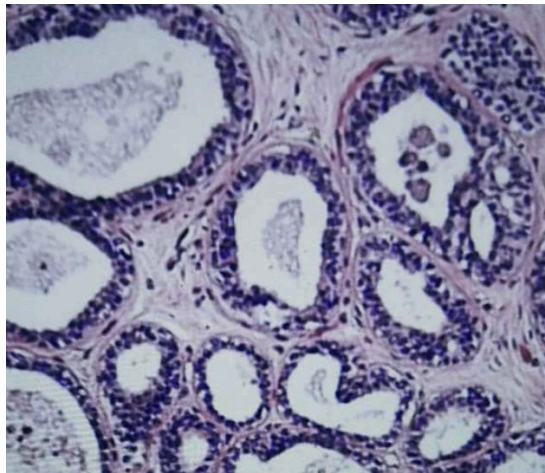


Figure 2. Pathological study of breast tissue—bilateral fibrocystic mastopathy.



Figure 3. Right breast, appearance on the 10th day of hospitalization.

After blood transfusion, attempts to induce labor were unsuccessful, and a female neonate weighing 1200 grams with an Apgar score of 7/10 at the first minute was extracted by cesarean section. The immediate postpartum period was simple.

However, at 7 days postpartum, we noted a deterioration in her general condition with dehydration and malnutrition. The patient weighed only 50 kg.

The breasts were tense, painful, ulcero-necrotic-hemorrhagic, suppurated with monstrous dilatation of the mammary veins. They measure 39 cm by 30 cm (**Figure 4**).

A semi-emergency bilateral mastectomy was then performed with simple immediate postoperative care. The operative parts each weighed 8 kg (**Figure 5**).

The skin suture was done under tension on the left side, which led to a fall of eschar. Directed healing (deterision, budding and epidermalization) went well (**Figure 6**).



Figure 4. Budding and enlargement of the breasts.

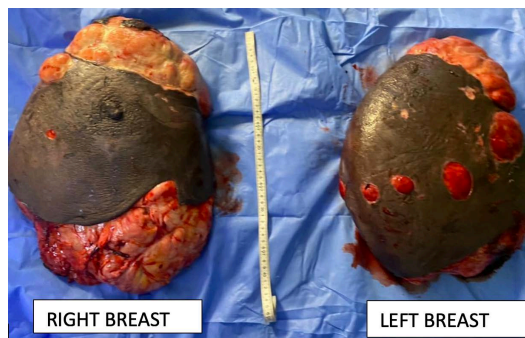


Figure 5. Surgical parts after bilateral total mastectomy.

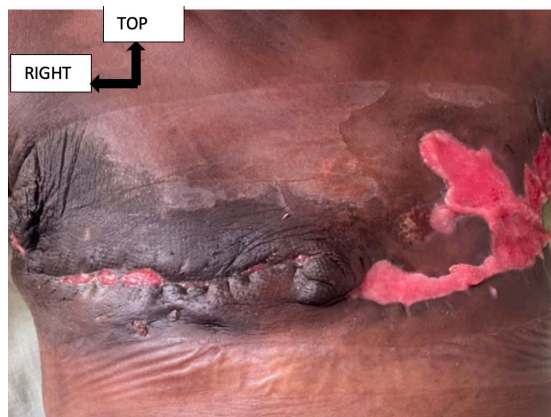


Figure 6. Aspects at day 20 post-surgery.

3. Discussion

3.1. Diagnostic Aspects

Breast examination can be difficult because of the gravidic changes, but it should be systematic at each contact with the patient.

Indeed, the diagnosis of gravidic macromastia is essentially clinical and ultrasonographic [1] [2] [5]. Retrospective confirmation can be obtained with a removal of breast tissue greater than 1 kg per breast. In our patient, the breasts weighed 8 kg each, *i.e.* a total of 32% of her body weight.

The knowledge of this pathology allows any practitioner to think about it in front of any abnormal or even suspicious increase in volume of the mammary gland.

However, it is necessary to be aware of the possibility of a cancerous lesion [1]. In our patient, the histological examination revealed a bilateral fibrocystic mastopathy. The biopsy allows not ignoring a cancerous lesion [1].

Prolactin assay was not performed because it could not be interpreted in this situation.

3.2. Therapeutic Aspects

Dopaminergic agonists have not had any effect on the growth of the gland and this has been noted by other authors. [2] [4] [6] [7]. Surveillance or conservative surgeries are therapeutic options in uncomplicated cases [1]. Indeed, regression after delivery is possible, but with a high or even systematic risk of recurrence [1]. However, in our patient, the risk of sepsis or even death led us to opt for radical surgery [4] [8] [9]. The therapeutic management is therefore essentially based on surgery.

Because of the loss of skin substance, the suture under tension led to a fall of pressure sores, constituting an infectious entry point.

Dopaminergic agonists have not proven to be effective. We did not note any improvement after her delivery. In our patient, the rapid necrosis of the mammary gland was a formal indication for surgery. Rakislova [4] reports two cases with fatal outcome due to severe sepsis in HIV infection [7].

The repercussions of gigantomastia are not only physical but also psychological and social, which implies a global and multidisciplinary management. Medical treatments will be instituted according to the clinical presentation: septic or hemorrhagic shock, pain. Surgery is unavoidable for complicated forms.

3.3. Prognostic Aspects

We plan to complete the explorations, particularly on the genetic and immunological side. The infectious workup performed.

Bilateral total mastectomy has no effect on fertility and subsequent pregnancies [1] [2]. However, patients must be well informed of the impossibility of breastfeeding even after breast surgery. The psychological aspect must therefore be taken into account.

The patient is waiting for a breast reconstruction. The postoperative course is good with correct healing, weight gain and correction of anemia.

Gigantomastia can be of several types [1], however, the clinical presentations and therapeutic options may have similarities. It is essential in all cases to take into account the psychological impact.

4. Conclusion

The breast is not involved in reproductive function, but it is associated with the image of femininity and motherhood (breastfeeding). Gestational gigantomastia is a rare, non-cancerous but highly disabling condition that can be life-threatening for pregnant women in certain situations, thus requiring radical treatment (total mastectomy).

Conflicts of Interest

The authors have declared that they have no conflicts of interest.

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