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Congenital mammary asymmetry
Classification and surgical treatment

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Congenital mammary asymmetry. Classification and surgical treatment

AIM OF THE STUDY: *The Authors intend to guide the choice of surgical treatment for mammary asymmetry, according to specific form of asymmetry.*
MATERIAL AND METHODS: *Possible types of symmetryzation surgery are listed. First Author's personal technique is described and some clinical cases are presented.*
DISCUSSION: *Regardless to specific surgical needs for the single case, a generally valid concept is the necessity of a surgical moulding meant to obtain the same volume for both breasts before positioning of implants. This allows a longer lasting symmetry between breasts, as aging modifications bilaterally occur at equal speed if the adipo-glandular structures obtained have the same volume.*

KEY WORDS: Breast asymmetry, Surgical treatment, Tuberous breast.

Introduction

In the last decades Western society has emphasized the necessity to have or obtain an appearance in conformity with the aesthetic canons commonly imposed. Female breast has great importance, from both a functional and an aesthetic point of view. This implies that every deviation from canons of breast size and shape, nowadays considered "normal", can be the cause of some dissatisfaction for women.
Mammary symmetry is an essential element in female as it conditions breast beauty and harmony. Not always do mammary glands look perfectly symmetric. Minor differences in shape, volume or position between the two breasts are usual in most women.
From a clinical point of view, we can speak of real mammary asymmetry only when these variations between the breasts are sufficiently evident.
Of course asymmetry is not only a cosmetic problem but can also cause psychological dysfunctions impairing interpersonal relationships and bringing to **dysmorphophobic thoughts**.

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Breast asymmetry is most of the times congenital but its etiopathogenesis is often unknown. Data concerning its prevalence are few in literature.
Authors' purpose is to consider the types of breast asymmetry, in order to adopt an operative classification which can ease the choice of the most indicated surgical option for the best aesthetic result in the specific case.

Classification

Breast asymmetries can be classified in two large classes [1]:

CONGENITAL
• *Isolated with volume or shape deformity*
These forms are not associated with other malformations. In these cases mammary deformities can be hyperplastic or hypoplastic and they can involve just one or both breasts.
– *Asymmetric bilateral hyperplasia*: when both breasts have a volume larger than the ideal breast (arbitrarily considered about 250-300 cc), but with an evident difference in volume between the two.
– *Asymmetric bilateral hypoplasia*: when both breasts have a volume smaller than the ideal breast and an evident difference in volume.
– *Monolateral hyperplasia*: when only one breast has an increased volume.

– *Monolateral hypoplasia*: when only one breast has a diminished volume.
– *Hyperplasia with contralateral hypoplasia*: when both breasts have a pathologically modified volume but in two opposite directions.
– *Tubular/Tuberous breasts*[2]

• *Associated with others malformations*
A particular form of mammary asymmetry is to be found in Poland Syndrome [3,4,5]. In this case also bone and cartilaginous ribcage malformations are associated with mammary hypoplasia.
Possible associated deformities are also pectus excavatum and pectus carinatum [6].

ACQUIRED
– *Iatrogenic.*
– *Secondary to traumas and infections.*
– *Secondary to radiotherapy.*
– *Secondary to burns.*

Authors will take into account the congenital forms of breast asymmetry.

Material and methods

The choice of the surgical technique for asymmetry correction depends on morphology of the single case.
In general the best decision is the simplest and easiest surgical method, which allows to preserve glandular function, to reduce the extent of scars and to obtain a long lasting result.
Various Authors [7-13] dealed with mammary asymmetry, treating it differently according to the specific cases.
The following are some of these possible choices, which are always based on the particular initial situation:

– Augmentation mammaplasty with silicone implant on hypoplastic breast, possibly associated with mastopexy or with contralateral reduction mammaplasty
– Monolateral reduction mammaplasty
– Asymmetrical bilateral reduction mammaplasty
– Myocutaneous trasposition flaps (Latissimus Dorsi, serratus or TRAM Flap) for patients in whom contralateral mammary implants cannot be used [14]
– Augmentation mammaplasty associated with contralateral reduction mammaplasty and bilateral insertion of implants of the same size
– Augmentation mammaplasty associated with contralateral reduction mammaplasty and bilateral insertion of implants of different size

In this work the Authors present a technique for congenital mammary asymmetry correction. It essentially consists of reducing the volume of the larger breast to that of the contralateral and then of increasing both breasts with implants of the same size. In case of tubular/tuberous breast [2], the surgical treatment is that for hypoplasias, along with a correction of shape [15-19]. The latter consists of a redistribution of mammary parenchyma [20] (Figs. 1 and 2).

Fig. 1: Intraoperative view of adipo-glandular resection of breast base.

Fig. 2: Intraoperative view of symmetry obtained between breasts.

For reduction of the larger breast we utilize Peixoto's mammaplasty procedure [21]. The latter, through a cutaneous and adipo-glandular resection of breast base and inferior pole, allows an excellent lift and projection of mammary dome. The Authors consider that the base reduction of the larger breast has two advantages. The first advantage consists in reducing both breasts to the same volume in order to position two implants of the same size. The implants will determine the mammary shape.
The second advantage is connected with the result longevity: After the insertion of two equal size implants, normally both breasts undergo similar changes through years. On the contrary, in case of monolateral implant insertion, the breast without implant will certainly suffer from ptosis, thwarting the symmetrization surgery.

Therefore, the decision of inserting only one implant must be made just in case the patient refuses bilateral implant insertion.
Mammary volume is reduced by cutting off dome base to obtain a volume symmetry and not the shape one.
The moulding of both breasts to the same volume is necessary in order to treat them with equal implants. If neither ptosis nor cutaneous laxity are observed in the hypertrophic breast, an amputation of breast base, as described by Peixoto, can be performed.
On the contrary, if the breast appears ptotic or pseudoptotic, then it requires a reduction along with a suspension surgery, usually by means of the vertical scar technique, as the inverted T would affect the inframammary fold shape.

CASE N. 1
Case ➡ bilateral tuberous breast with shape and volume asymmetry.
Surgery ➡ right breast – round block; left breast – vertical mastopexy (left reduction 50 cc and 240 cc round implant bilateral insertion) (Figs. 3 and 4).

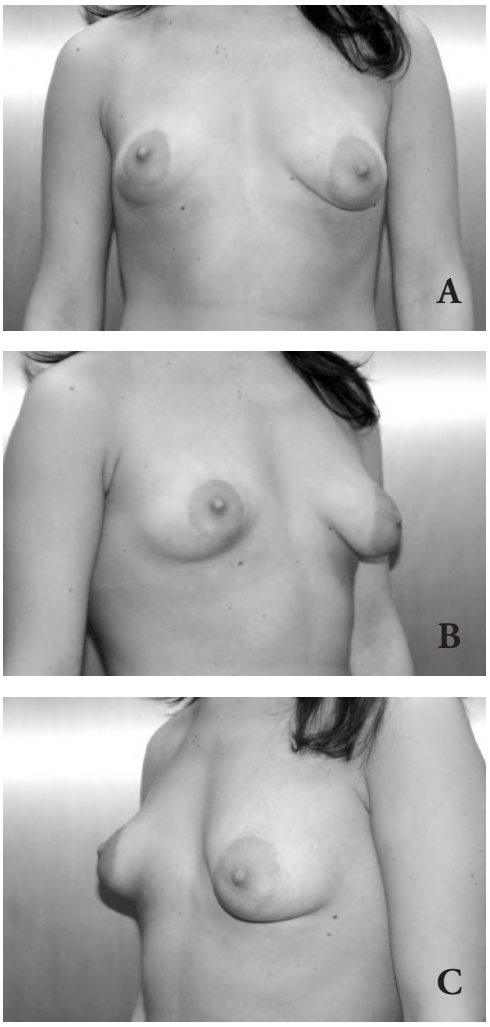

Fig. 3 a, b, c: Preoperative view of case 1.

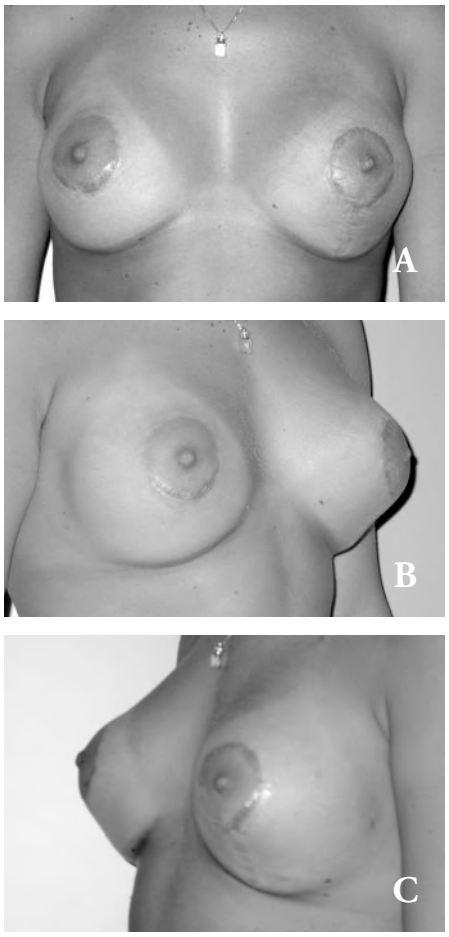

Fig. 4 a, b, c: Postoperative view of case 1.

CASE N. 2
Case ➡ volume asymmetry, right breast hypertrophic, left breast hypotrophic.
Surgery ➡ right reduction 400 cc; bilateral augmentation through FM 310 Mc Ghan prostheses (Figs. 5 and 6).

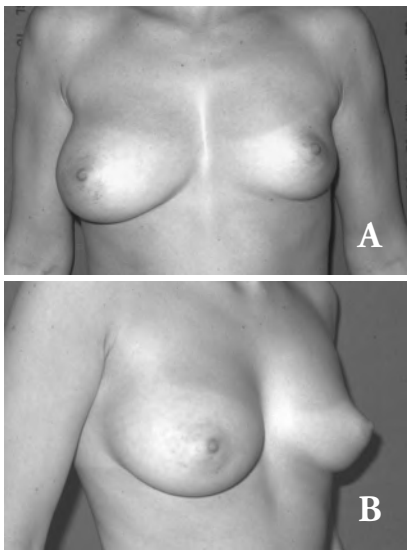

Fig. 5 a, b: Preoperative view of case 2.

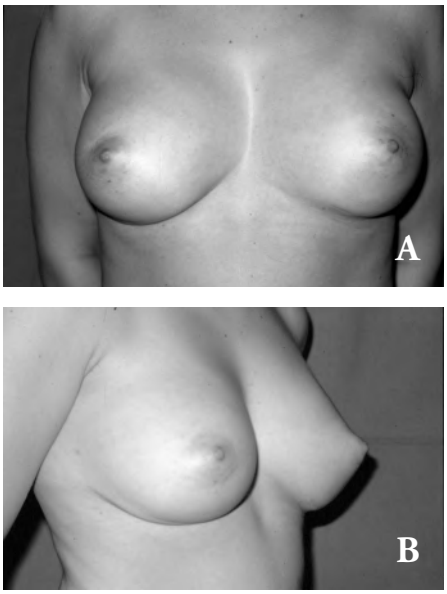

Fig. 6 A, B: Postoperative view of case 2.

Case n. 3

Case ➡ bilateral tuberous breast with shape and volume asymmetry.

Surgery ➡ left breast – round block; right breast – vertical mastopexy (right reduction 50 cc and 240 cc round implant bilateral insertion) (Figs. 7 and 8).

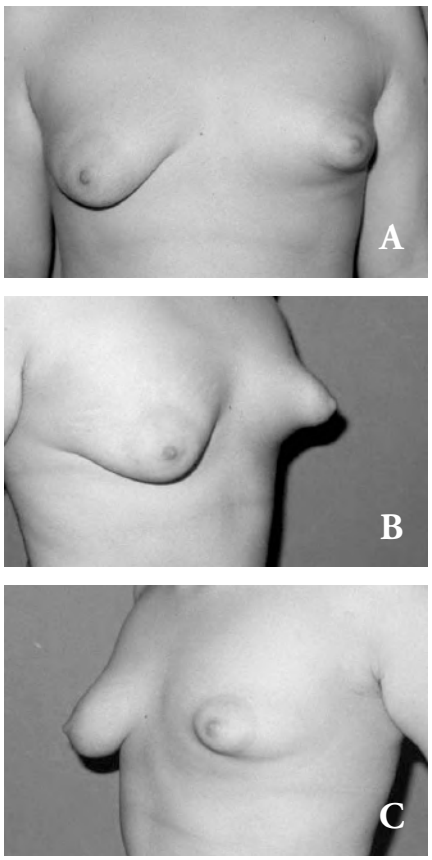

Fig. 7 A, B, C: Preoperative view of case 3.

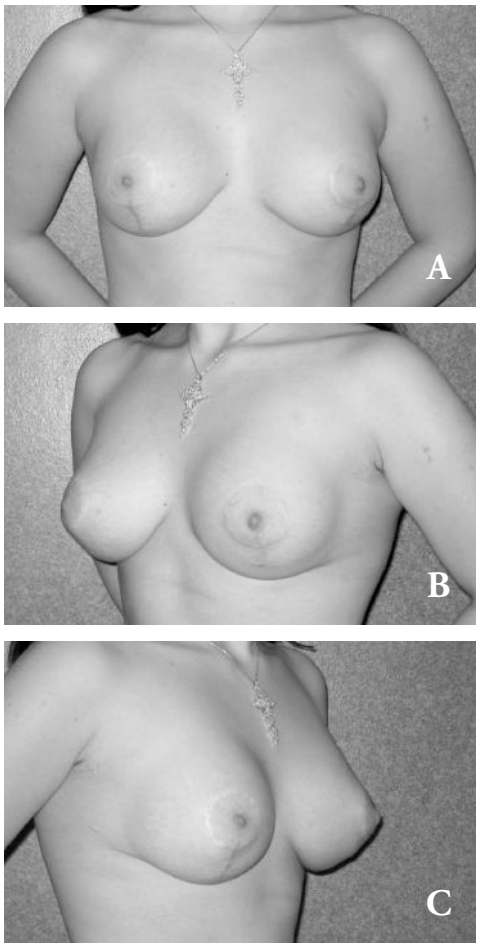

Fig. 8 A; B, C: Postoperative view of case 3.

Case n. 4

Case ➡ volume asymmetry, right breast hypotrophic; left breast normotrophic.

Surgery ➡ left mammary reduction 150 cc; bilateral augmentation through FM 235 (Figs. 9 and 10).

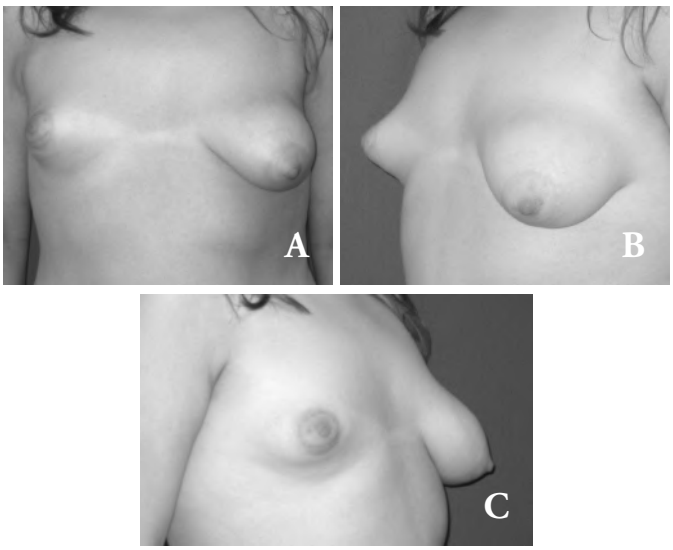

Fig. 9 A, B, C: Preoperative view of case 4.

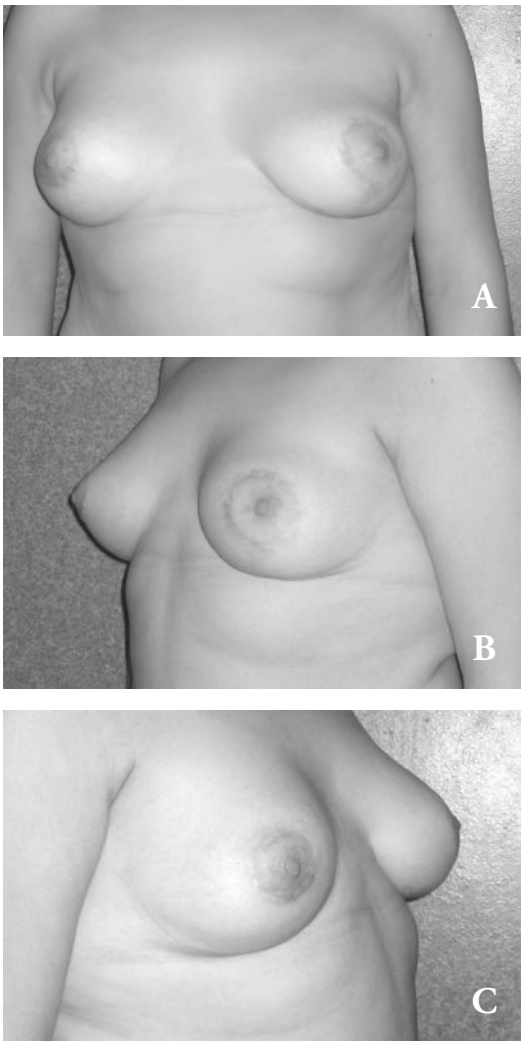

Fig. 10 A, B, C: Postoperative view of case 4.

Discussion

The deformities whose surgical treatment has been by authors described are hyperplasia with contralateral hypoplasia.
The reduction of both breasts to the same size is essential in order to treat them with equal implants. If the hypertrophic breast is not ptotic and has no cutaneous laxity, an amputation of breast base, as described by Peixoto, can be performed.
On the contrary, if the breast appears ptotic or pseudoptotic, then it requires a suspension surgery in addition to a reduction, most of the times with the vertical scar technique, as the inverted T would cause a shape anomaly of the inframammary fold.
By doing this a symmetry of both volume and structure and a better aesthetic and long lasting result can be obtained.
In young patients with sufficient mammary parenchyma and good skin elasticity, mammary reshaping without implant insertion must be limited to very selected cases. In fact there is a risk of ptosis or pseudoptosis capable of emphasizing and recreating asymmetry with time.

Riassunto

OBIETTIVO: Gli autori intendono indirizzare la terapia chirurgica dell'asimmetria mammaria a seconda della specifica forma di asimmetria.
MATERIALE DI STUDIO: Vengono elencate le possibili tipologie di intervento chirurgico di simmetrizzazione. La tecnica personale del Primo Autore è descritta e vengono presentati alcuni casi clinici.
DISCUSSIONE: A prescindere dalle specifiche esigenze chirurgiche che il singolo caso presenta, un concetto generale è la necessità di modellare chirurgicamente le due mammelle riconducendole sempre allo stesso volume prima di posizionare le protesi. Questo consente risultati di simmetria fra le mammelle più duraturi, in quanto l'invecchiamento procede consensualmente in due strutture adipo-ghiandolari di pari volume.

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