

A developmental anomaly of the mammary glands — gigantomastia. A case report

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Developmental anomalies of the breast are frequently observed in women. The most serious pathology is gigantomastia. This type of breast hypertrophy may be caused by hypersensitivity of the breast oestrogen and progesterone receptors, by disturbances of the normal balance of oestrogen and androgen hormones, by hyperthyroidism or by hormonal activity of the neoplasm. In most cases gigantomastia produces pathological changes in the vertebral column which become manifest as discopathia, scoliosis or scoliokyphosis. A case of gigantomastia treated with surgery is presented and the effect of plastic operation is demonstrated. Surgery may be recommended as an excellent therapeutic treatment of gigantomastia.

key words: gigantomastia, breast anomaly, treatment, breast reduction

INTRODUCTION

The excessive proliferation of glandular and fatty tissue of the mammary gland known as gigantomastia constitutes a great problem for many women. Hyperplasia of the mammary glands leads to postural malformations, such as spinal curvature or discopathy, back ache and trophic lesions of the breast skin with ulcerations and scars. A cosmetic defect of this kind may, especially among young women, trigger emotional and psychological disturbances and can cause depression, anorexia or bulimia [2, 4].

There are several causes of gigantomastia. Gigantomastia in puberty is explained by a hormonal imbalance of oestrogens and androgens, which may lead to an autonomic, excessive hyperplasia of the glands [1, 3]. Gigantomastia may also be a side effect of certain medications or an effect of the hormonal activity of some neoplasm [5]. The overgrowth of the mammary glands may also accompany thyro-

toxicosis [7]. The cause of idiopathic gigantomastia is an increased aromatisation of androgens into oestrogens as well as hypersensitivity of the oestrogen receptors to physiological oestrogen level [6].

CASE REPORT

A 51-year-old female patient was diagnosed with gigantomastia (Fig. 1, 2). The patient reported a familial incidence of this anomaly. She had given birth twice but had no history of hormonal therapy. She was admitted to the Department of Plastic Surgery due to the presence of extremely intense degenerative spinal lesions and, in particular, a deepening of thoracic kyphosis and lumbar lordosis. Her total body mass was 70 kilograms and the breast itself weighed 17 kilograms. Mammography revealed massive hyperplasia of the gland, although no signs of neoplasia were found. Because of the intense trophic and inflammatory lesions the patient was administered



Figure 1. Gigantomastia — patient before breast reducing operation (anterior view).



Figure 2. Gigantomastia — patient before breast reducing operation (lateral view).



Figure 3. Patient after breast reducing operation (anterior view).



Figure 4. Patient after breast reducing operation (lateral view).

an antibiotic before the breast reducing procedure. After preparation, the patient underwent mammary reduction surgery with the transplantation of the nipple. Approximately 9 kilograms of the mammary gland were resected. Histopathological examination revealed fibroglandular tissue, lymphocytic infiltrations and venostasis. After the complete healing of the wounds the patient evaluated the result of the operation as very good (Fig. 3, 4).

RESULTS AND DISCUSSION

Gigantomastia is an anomaly which causes serious ailments, often making it impossible for the patient to live a normal life. Surgical intervention is therefore a method of choice in this pathology. A proper assessment of the patient as well as good co-operation between orthopaedists, psychologists and plastic surgeons is essential for the satisfactory effect of the operation.

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