Massive Idiopathic Prepubertal Gigantomastia

Gigantomastia is rare, and the majority of cases are reported after puberty. In some cases, it can be due to an exaggerated response of breast parenchyma to estrogen [1-2]. We present the case of an 11-year-old Mexican girl, with progressive, bilateral, and symmetric breast enlargement (Fig. 1). It started before menarche, and caused postural problems and back ache. The patient did not have any illness or a family history of gigantomastia. She was not receiving any drugs. The patient weighed 37.7 kg, and height was 139 cm (BMI 19.5); external genitalia were Tanner I. On examination, breasts were massively enlarged (35 cm from the sternal notch to nipple areola complex). The breasts were ptotic, and the superficial veins were prominent and dilated, without ulceration of the skin. The areola were immature without any discharge or hyperpigmentation. No breast masses could be palpated. There was no axillary lymphadenopathy. Hormonal assays were within the normal range. Ultrasonography of the breast and pelvis was normal. No evidence of any tumor was found on magnetic resonance imaging of the brain.

She underwent a reduction mammoplasty with the inferior pedicle technique, with preservation of the nipples areola complex. Weight of each breast was 4000 g, comprising about 20% of the total body weight. The histological examination showed hyperplastic terminal duct lobular units with edematous stroma. Breast tissue estrogen and progesterone receptors were negative. Post-operatively, the measurement of the sternal notch to nipple areola complex was 16 cm. Four years later, she underwent a breast augmentation with mammary implants. After 10 years, there was no recurrence, and she had an acceptable physical appearance.

In idiopathic prepubertal gigantomastia, reduction mammoplasty is usually the first treatment option, with or without hormonal therapy, because of preservation of lactation. Recurrence may occur in many cases [3-5].

REFERENCES