Giant Lipoma: Case Report

Antonio Carlos Abramo1*, Thiago Cassio Santos Walmsley Lucena2 and Marcio Scartozzini2

1Head Professor of the Post-Graduate Course in Plastic Surgery of the ACA - Institute of Assistance in Plastic Surgery of São Paulo, Division of Plastic Surgery at General Hospital São Luiz - Morumbi, Brazil
2Staff of the Post-Graduate Course of Plastic Surgery of the ACA - Institute of Assistance in Plastic Surgery of São Paulo, Division of Plastic Surgery at General Hospital São Luiz - Morumbi, Brazil

Abstract

Herein is described a case of giant lipoma on the right side of the trunk in a 56-year-old male patient. The tumor gradually increased in size over the past 15 years until it reached 30cm in diameter and 15cm of projection. Preoperative MRI suggested a benign lipoma split with several inner septa without infiltration into the deep layers, not excluding the possibility of liposarcoma. The patient underwent surgical resection through a double Wplasty incision, which allowed a wide approach to the tumor and its en bloc resection. In addition, allowed to remove skin redundancy after the lipoma resection without enlarging the length of the incision. Body contour was recovered without complications.

Keywords: Glipoma; Double Wplasty; Broken line incision, MRI

Introduction

Lipomas are very common benign tumors of the adipose tissue with mesenchymal origin that rarely reach large dimensions [1]. They can be single or multiple, usually distributed in the subcutaneous tissue of the neck, trunk, and lower limbs. They have well-defined limits determined by a fibroadipose membrane, with elastic consistency that allows their gradual growth [2]. Lipomas exceeding 10cm in diameter and 1,000 grams in weigh are considered giant [3]. Giant lipomas, regardless of size, are usually asymptomatic, except when they cause pressure on peripheral nerves or surrounding structures [4]. Malignancy of lipomas is rare, although they can be found in the form of liposarcoma usually located in the lower limbs [5]. Magnetic resonance imaging (MRI) has been used to accurately define the anatomical relationship of giant lipomas and their involvement with surrounding structures [6]. This case report describes a giant lipoma located in the trunk, with 30cm in diameter and 15cm of projection. Preoperatively MRI was performed to define the tumor relationship with the surrounding tissues. It was submitted to surgical treatment using a double Wplasty incision approach.

Case Report

D.L.J., 56 years old, male had a tumor located in the trunk, below the right scapula, measuring 30cm in diameter. Patient reported progressive growth of the tumor over the last 15 years without association with other pathology, such as, infection or local trauma. No pain was reported, only a progressive discomfort during this period. Clinical appraisal showed the tumor with a fibroelastic consistency without adherence to the deep plane. It was distributed along the entire right trunk from the angle of the scapula to the posterior iliac crest, longitudinally, and from the vertebral column to the posterior axillary line, transversally, with 15cm projection (Figure 1). Magnetic resonance imaging showed tumor with 30cm in the longitudinal diameter, 25cm in the transversal diameter and 12cm in height, and several inner septa without infiltration to neighboring tissues. The diagnosis suggested an adipose benign lesion, such as a lipoma, but not excluded the possibility of liposarcoma (Figure 2). The proposed treatment consisted of an en bloc resection through a broken line incision performed by a double W incision. The double W incision was marked using a 25cm straight line on the center of the tumor at the level of the seven thoracic vertebra, 2.5cm away from the midline and the posterior axillary line. On the straight line, 6 right triangles were drawn side by side, 4cm base and 2cm height. The bases were supported on the straight line and the triangles were sequentially inverted, creating a double Wplasty (Figure 3A). The incision of the lateral sides of the triangles created a broken line, exposing a tumor with multiple lobes separated by fibrous septa (Figure 3B). The tumor was removed en bloc, respecting the fibrous capsule, from the aponeurosis of the latissimus dorsalis muscle and the paravertebral muscles (Figure 3C). The redundant skin was...
Corrected by resecting 3 cm from each incision margin, maintaining the double Wplasty incision (Figure 3D). The skin flaps were fixed to the aponeurosis through captured points to avoid a dead space. A vacuum aspiration drainage system was used. A compressive elastic dressing were applied over the double Wplasty and maintained for 7 days. It was replaced by elastic compression mesh for 30 days. The anatomic pathology examination showed that the tumor had 2,140 grams, with a 23 cm x 21 cm x 12.5 cm. It was diagnosed as lipoma, with no sign of malignancy. Postoperative complications were not observed. After 6 months of the surgery, the patient presented an oblique broken line scar in the right trunk without retractions with recovery of the body contour (Figure 4).

**Discussion**

The most common surgical treatment for lipomas is an en bloc resection of the tumor [7]. Liposuction has been proposed as an alternative surgical treatment; however, given its high relapse rate, the indication for this treatment has been restricted [8]. Magnetic resonance imaging allowed accurate definition of the limits and infiltration of the tumor in the neighboring tissues, been helpful in the tumor dissection. In the case reported, the lipoma had a well-defined contour provided by its fibrous capsule, making easy its resection. The double Wplasty incision provided a wide approach, allowing a safe and precise resection of the lipoma. In addition it corrected the redundancy of the skin flaps after the tumor resection without enlarging the incision length and reducing the dead space. Double Wplasty also allowed an easy distribution of the skin flap over the muscle aponeurosis. The captured points between the skin flap and the deep aponeurosis avoided seroma and hematoma in the extended resection area, reducing the recovery period.

**Conclusion**

The double Wplasty incision allowed an easy en bloc removal of the lipoma and an adequate rearrangement of the skin flaps without enlarging the incision, as well as the recovery of patient’s body contour.

**References**