

Use of Prosthesis in the Femoral Region

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Abstract

The author presents his experience with cosmetic surgery of the legs, to improve the shape of the so-called "thin legs", resulting from muscular atrophy of the femoral region. Molded silicone-gel prosthesis are placed under the muscles of the inner thighs. The technique is simple and the surgical steps are described. A special instrument is employed which facilitates and helps the dissection and placement of the prosthesis through a small 5 cm incision in the subgluteal fold. A more harmonious contour of the legs in the femoral region is achieved.

Introduction

In the search for perfecting the shape of the lower limbs, plastic surgery accomplishes procedures which permit the increase in the perimeter of the femoral region. It is based on the same principles of placing prosthesis in the calves, since molded silicone-gel prosthesis are utilized. They are specially designed prosthesis, triangular in shape with its base cephalad, following the geometric shape of the lower limbs.

Sizes range from 18 to 24 cm in length, 6 to 8 cm in width and 2.5 to 3 cm in height (Fig. 1).

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Material and Methods

Usually peridural anesthesia is used with the patient in ventral decubitus.

The approach is through the subgluteal line, via a ± 5 cm skin incision. The subgluteal cellular tissue is dissected up to muscular aponeurosis: internal rectus, internal vastus and median adductor. Vertical dissection below these muscles, introducing the head of the special elevator in this opening (Fig. 2). The instrument is introduced gently toward the inner side of the knee, as already mentioned the undermining proceeds below these muscles.

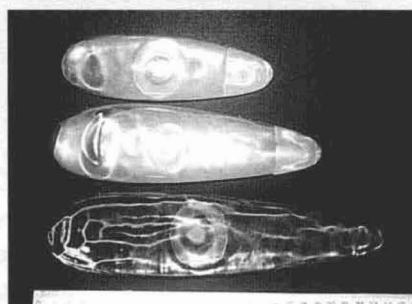


Fig. 1 - Types of Montellano silicone-gel leg prosthesis.
Fig. 1 - Tipos de próteses de perna Montellano.
Silicone-gel.

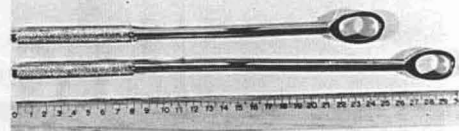


Fig. 2 - Leg elevators designed by the author.
Fig. 2 - Descoladores de perna idealizados pelo autor.

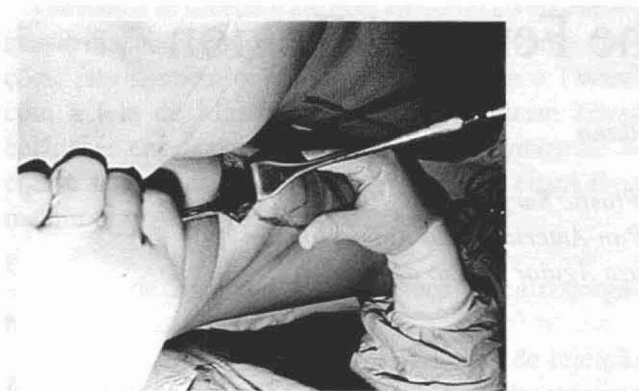


Fig. 3 - Atraumatic blunt dissection on the inner thigh.

Fig. 3 - Dissecção atraumática com descolador rombo na coxa interna.

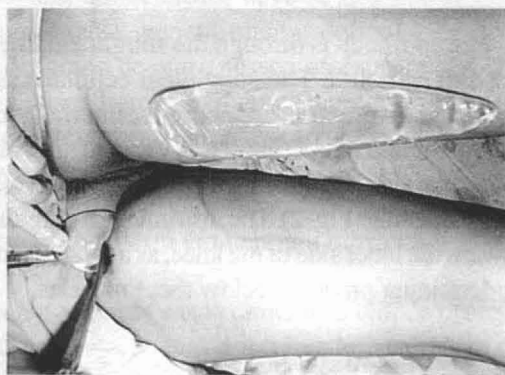


Fig. 4 - Introduction of the prosthesis in the tailored pocket.

Fig. 4 - Introdução da prótese de perna na loja confeccionada.

Important structures are not injured, neither the internal saphenous nerve nor the femoral artery and vein are affected, since the blunt dissection is simple, atraumatic, with minimum bleeding and without major problems (Fig. 3). A guide is used to introduce the prosthesis in this region of the inner thigh, placing it along the pocket fashioned (Fig. 4). An adhesive bandage is used for the dressing which is completed by bermuda shorts of medium compression.

Results

An increase in perimeter ranging from $\pm 2-3$ cm is obtained throughout the femoral region, achieving a more pleasing aspect to the mid femoral thigh. The scar is concealed in the gluteal fold (Figs. 5,6).

A total of 25 surgeries were performed. No capsular contractions nor distortions in the shape of the leg were

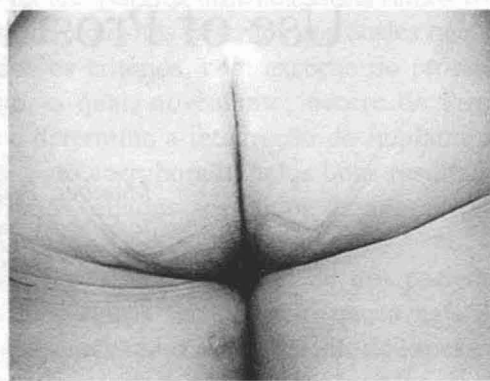


Fig. 5 - The scar is concealed in the gluteal fold.

Fig. 5 - A cicatriz se mimetiza no sulco glúteo.



Fig. 6 - Aspect of the scars in the sulcus, raising the buttocks.

Fig. 6 - Vista das cicatrizes nos sulcos elevando os glúteos.

observed in the immediate or late post-operative stages (Figs. 7,8,9,10).

Discussion

This surgery is indicated for muscle atrophy caused by poliomyelitis in this region, for burn and accident sequelae with deformation of the femoral region. The objective of most of these surgeries, is purely esthetic, for the so-called "thin legs" and "genu valgum" legs. Large size prosthesis are inserted for the most part.

This technique is similar to other inclusion surgeries and is one more option for the plastic surgeon's arsenal. It is not only esthetic, but also reconstructive. X-rays taken in the late p.o. period, confirm maintenance of the prosthesis' position in the inner femoral region (Figs. 11,12).



Fig. 7 - Preoperative.
Thin thighs.
Fig. 7 - Pré-operatório.
Coxa fina.



Fig. 8 - Post-operative
aspect with prosthesis.
Fig. 8 - Pós-operatório
com próteses.



Fig. 9 - Preoperative.
Posterior thigh.
Fig. 9 - Pré-operatório.
Coxa posterior.

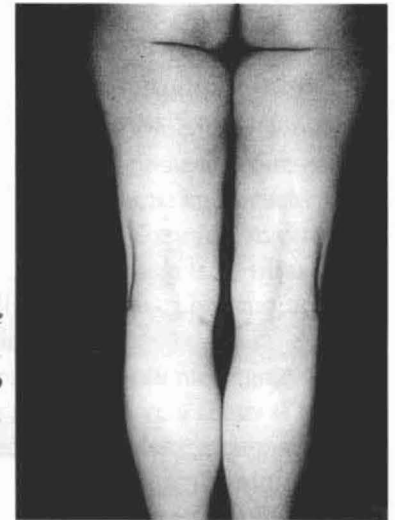


Fig. 10 - Post-operative
with femoral prosthesis.
Fig. 10 - Pós-operatório
com prótese femural.



Fig. 11 - Marking the
prosthesis of the inner
femoral leg.
Fig. 11 - Demarcação das
próteses de perna femural
interna.



Fig. 12 - X-ray, position of
the prosthesis. Inner thigh.
Fig. 12 - Raios X,
posição das próteses.
Coxa interna.

References

01. CARLSEN L. Calf augmentation. A preliminary report. **Annals of Plastic Surgery** Vol 2 - June, 1979.
02. FINOCHIETTOR. Cirurgia básica. **Lópes Libreros Editores**. Buenos Aires, 1962.
03. CLICENSTEIN J. Correção das aminotrofias dos membros por inclusão de próteses de silicone. **Rev Bras Cir**, 69 (3/4): 1979.
04. GONZALEZ UM. Técnica quirúrgica: Comunicação personal. São Paulo, 1982.
05. HAKME F, GOMES B, SJOSTEDT C et al. Prevenção e tratamento da contratura capsular. **Revista Bras. Cir**, 74 (2): 59-64, 1984.
06. MONTELLANO L. Plástica da panturrilha. **Anais XXII Cong Bras Cir Plást**, Gramado, APLUB, 637, 1985.
07. MONTELLANO L. Aesthetic calf surgery. **Annals of the International Symposium "Recent Advances in Plastic Surgery"**, São Paulo, 343, 1989.
08. MONTELLANO L. Calf augmentation. **Annals of Plastic Surgery**, Vol. 27, Number 5, Little Brown and Company. Boston, 1991.
09. MONTELLANO L. Anestesia loco-regional em cirurgia estética. São Paulo. Ed. Hipócrates, 407, 1993.
10. MONTELLANO L. Atualização em cirurgia plástica estética. São Paulo. Robe Editorial 563, 1994.
11. SPADAFORA A, SANMARCO T. Cirurgia de obesidad, flaccidez cutánea y envejecimiento. **Lópes Libreros Editores**, Buenos Aires 1974.
12. TESTUT L, JACOBO. Anatomia topográfica. Salva Editores, 1961.
13. ZENTENO S, MONTELLANO L. Plastia de aumento de panturrilla. **Cir Ibero-Latinoamericana**, Vol. XII, Núm. 3, 1986.