

# Patient Satisfaction with Posterior versus Posteromedial Brachioplasty Scar

## Abstract

With the increased popularity of brachioplasty, and with postoperative scarring being the major concern for patients, choice between different incision techniques should be carefully considered. The most widely used approaches are the posterior and posteromedial ones. In this work, we utilized the two types of approaches in two patient groups, 8 patients each, and compared patient-perceived results. The overall satisfaction level was slightly higher, on average, in the posteromedial group but this was not statistically significant. However, patients in the posteromedial group had a statistically significant lower scores of perceived scar visibility ( $p = 0.0239$ ). Our data suggest that a posteromedially-placed scar would be the optimal choice for patients undergoing brachioplasty, taking into account individual patient needs.

## Introduction

The demand for brachioplasty is widely on the rise (1). The number of brachioplasties performed annually in the United States was documented to have increased from 338 to 14,505 over eight years; this represents a 4191% increase, and when compared to the 36% increase in breast augmentation surgeries performed in the same years, this shows the great popularity of the procedure and its widespread acceptance by the general population (2). Many refinements and adjuncts have supplemented the technique over the years, but most of the authors agree that postoperative scarring is the major concern for patients (3,4).

Since the initial description of the procedure in 1954, many surgeons have proposed different techniques with different scar positions, claiming superiority of one over the other (5). The rates of wound dehiscence and hypertrophic scarring have been reported to be 9% and 24%, respectively (6). The major cause for patients being unsure about the operation is, subsequently, the nature and visibility of the scarring (3).

There are three major positions commonly chosen for brachioplasty incision: the posterior incision (sometimes referred to as posterior straight incision or brachial sulcus incision), the posteromedial incision, and the bicipital incision (sometimes referred to as the medial incision) (2,7). The bicipital (medial) scar, although less visible, is not preferred by patients in previous surveys, and thus most surgeons opt for a posterior or a posteromedial approach (2,8). No head to head comparison between both approaches has been sought in any previous work and it remains a matter of surgeon's preference.

In this work, we aimed to describe our own experience with brachioplasty scar placement and compare patient's satisfaction with the outcome of the posterior and posteromedial approaches of brachioplasty.