

The Inferior-Medial Vector Fleur-de-Lis Abdominoplasty

R.C. Dinsmore; P.M. Pham; J. Lopez; J.H. Palubicki

Background:

The Fleur-De-Lis Abdominoplasty (FDLA) is a unique procedure that addresses both horizontal and vertical skin excess in one operation. Unfortunately, the FDLA is often avoided due to a perceived increased risk of flap necrosis.

Technique:

There are several published techniques for performing the FDLA. The simplest begins with a standard abdominoplasty resection, to which an upper midline resection is added. This technique is mentioned only to be condemned. The point of rotation for the two flaps is the costal margin. After resection, closing the midline draws the flap tips medially and upwards. This increases tension on the central transverse closure. In addition, when the combined flap is pulled downward for closure of the horizontal incision, causes the flap tips to rotate laterally, increasing tension to the lower midline incision.

Our technique begins with the inferior transverse incision. Flaps are elevated to the level of the umbilicus, above the umbilicus the lateral perforators are spared. The skin is split in the midline. Each flap is then drawn inferiorly and medially and a new midline marked. The horizontal excess is removed and the midline closed. The vertical excess is then marked using Lockwood demarcating clamps, excised, and closed. By drawing the flaps inferiorly and medially, the maximal midline resection can be performed without increasing tension on the lower midline closure. By delaying the transverse resection until the midline is closed, increased tension on the central portion of the transverse incision is avoided.

Results:

We reviewed our experience from 2001 to 2013. There were a total of 190 abdominoplasties, 45 of which were FDLA. We had no cases of major wound separation or flap loss. FDLA major complication rate was not statistically different from conventional abdominoplasty. Minor complication rate was higher (24.4% vs 11.7% p 0.052)

Conclusions:

Over-all complication rate for FDLA was higher than to that of traditional abdominoplasty. However, with proper technique, these complications are minor and are likely related to the ~50% longer incision length. The incidence of major skin flap necrosis appears to be strongly technique dependent. Using the technique presented, we have had zero incidence of skin flap necrosis or major wound separation. We have found the FDL to be safe and effective, with high patient satisfaction.