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A Novel Surgical Retractor in Abdominoplasty: Kirschner Wire

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Dear Editor,

Abdominoplasty operations are among the frequently performed plastic surgeries [1]. The goal in these operations is to reshape the musculoaponeurotic system by excising excess skin in the sagging anterior abdominal wall [1-3]. In some operations, it may be difficult to achieve symmetry on both sides of the anterior abdominal wall [4]. Traction and resection must be performed on an appropriate scale following meticulous planning so that symmetry can be achieved [2-4].

In abdominoplasty operations, various retractors, clamps and forceps are used in order to determine the amount of tissue to be excised. Sling sutures and dies are auxiliary materials used for this procedure. However, the amount of tissue to be excised may not be precisely determined by these methods, especially in excessively obese cases. In these obese cases, a second planning and excision could be necessary following the first excision. In our cases, application of retraction to the anterior abdominal wall using Kirschner wire (K-wire) is presented due to the tissue excision method during the abdominoplasty operation.

It was observed in our abdominoplasty operations that it was easier to perform retraction by means of double-ended Kirschner wires inserted into the skin flap. Kirschner wires are placed so that it falls below the level of excision, which will be excised in the skin flap. At this time, an assistant has inferiorly made three-dimensional traction. Through this maneuver, which also facilitates traction, the excess skin to be excised

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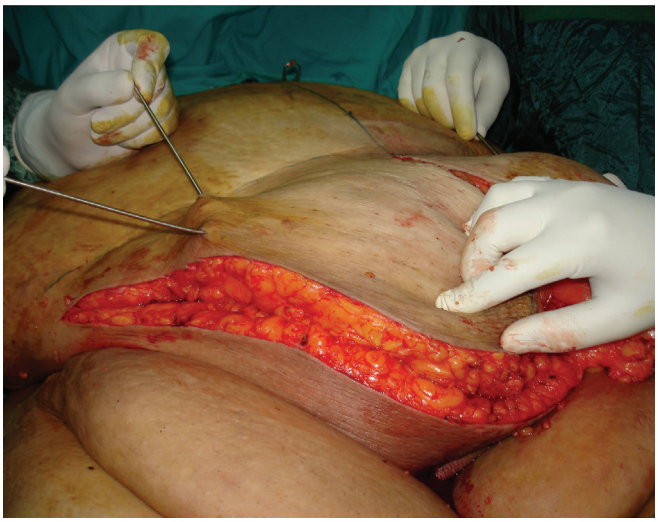

Figure 1. View of the traction method on the abdominal skin flaps.

was able to be determined in an easier way (Figure 1).

During abdominoplasty operations to obtain reduction and symmetry in the surgical area, after meticulous planning, an appropriate amount of traction and resection is necessary [3]. In classical retraction methods, forceps or other retractors that are placed in distal ends of the flaps provide traction from only one point and in cases where the tissue to be excised is wide, additional forceps are required [1,2,4]. In addition, since traction cannot be linear at every area of tissue to be excised, recurrent measurements and excisions can be necessary. Especially when the shaping of the lateral abdominal wall is performed with a classical retractor and forceps, the duration of the operation may increase. In the technique that we applied, Kirschner wire can be placed on the skin flap at any desired point and width. However, during this technique, traction and retraction can be obtained with a single hand and it provides the opportunity to manipulate the skin flap in all three dimensions. However, this technique provides symmetrical traction and a linear incision line of the abdominal flap. We believe that the strap and retraction methods that use Kirschner wire facilitate surgical manipulations during abdominal stretching operations and that they provide the opportunity to sufficiently excise in one step, in the desired fashion while decreasing the duration of the operation.

Conflict of interest statement

The authors declare that they have no conflict of interest.

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