Examination of Simple Technique to Make Abdominoplasty Incision Symmetrical: Original Article

Abdul Hamid Sharifian¹, Hamid Reza Alizadeh Otaghvar², Ehsan Jamali¹, Ali Akbar Jafarian⁴, Tara Motamedi⁵
¹MD, ABCS (ID), Consultant Cosmetic Surgeon, Erfan Niayesh General Hospital, Tehran, Iran. E-mail: hmdsharif@gmail.com
²Associate Professor of Plastic Surgery of Iran University of Medical Sciences, Trauma and Injury Research Center of Iran University of Medical Sciences, Tehran, Iran. E-mail: dhralizade@yahoo.com
³General Surgeon of Shohadaye Khalije Fars Hospital, Bandar Bushehr, Iran, Bushehr. E-mail: Ehsan.jhmd@gmail.com
⁴Associate Professor of Anesthesiology and Pain, Burn Research Center, Iran University of Medical Science, Tehran, Iran. E-mail: aajafari41@gmail.com
⁵General Phisician, Iran University of Medical Sciences, Tehran, Iran. Email: taramo_2005@yahoo.com

Abstract

Abdominoplasty is one of the most popular cosmetic surgeries which addresses reshaping of the abdominal wall through removing extra skin and unwanted fat tissues. The incision of this operation is mainly located on the lower skin crease of the abdomen. The location and shape of this incision is the main break of the final appearance of the operation. In order to have a well looking, symmetrical incision the shape of removing this extra skin should be well designed. In this article we introduce a very simple technique which enables us to remove that extra skin in a symmetrical fashion.

Keywords: Abdominoplasty, Skin.

DOI: 10.47750/pnr.2022.13.S03.079

INTRODUCTION

It is safe to say that paying attention to changes in the abdominal wall as a result of pregnancy, weight loss or weight gain, and the aging process is as old as human history. Our knowledge about the surgical methods of restoring these changes goes back to 1899, that is, when Kelly repaired these changes for the first time with the help of an incision in the middle region of the abdomen.

After Kelly and with the increase of surgeons' knowledge about the blood supply system of the skin and fat tissue, the system in the lymphatic phase and... little by little, Kelly's primary procedure underwent changes. In 1924, Thorek performed abdominoplasty by preserving the patient's own navel, i.e. the method he performed today. After him and in the 1970s, Kegnault and Pitanguy were surgeons who emphasized abdominoplasty with lower incisions and in the form of a W incision.

In the following years, the attention of surgeons was focused on removing as much excess skin as possible and repairing laxity and rupture of the abdominal wall. During this period, methods such as cutting bicycle handlebars were invented by Baroudi and Moras. The method of policing and gathering the rectus muscles in the middle line was invented by Calia and the method of policing the abdominal oblique muscles was invented for the first time by Psillakis. The invention of these methods gave the surgeon the opportunity to remove as much excess skin as possible from the patient's waist.

The introduction of liposuction in 1980 brought about another significant change in the methods of performing abdominoplasty. Currently, liposuction of abdominal fat is an independent part of abdominoplasty surgery.

The use of incisions and various methods in performing abdominoplasty has improved the quality and result of this operation day by day, nowadays patients pay more attention to the result of the operation and the shape of the incisions. In addition to having a suitable location, cosmetic surgical incisions must also have a suitable shape and symmetry, for this reason, it will be very important to choose a method that can ultimately create a symmetrical and beautiful incision. In a method called triangulation by J. Alexa Potter, Philip A. Griffin for abdominoplasts was proposed.

After determining the middle line and with the help of two marking sutures and using threads and clamps, the different points of the cut are identified and connected in parallel on the sides of the wound. The same method is also used to
design the cut on the skin that will be removed so that the cut is symmetrical at the end. (Figure 1)

Figure 1: The same method is also used to design the cut on the skin that will be removed so that the cut is symmetrical at the end.

This method is a reliable method to create a symmetrical cut at the end of the operation, but it requires two stitches with 20 silk in the xiphisternum and the center of the symphysis pubis, and it is a time-consuming method. The method that this article describes is a simpler method and because of this simplicity, it is faster, more practical and easier to implement.

**WORK METHOD**

In this method, like all abdominoplasty operations, the patient should be evaluated standing and lying down, and this evaluation will include the overall body symmetry, chest symmetry, side symmetry, and right and left abdomen symmetry.

After this and in the midline standing position, the approximate location of the incision on the lower abdominal fold is drawn according to the location of the navel and its distance from the commissure and the lines related to the inguinal folds. In the operating room and in the lying position, the midline is determined again. The cut place is fixed according to its distance from the camber of the previous cuts and its symmetry on the right and left sides and according to the lines of the angular folds. (Figure-2)

Figure 2: The cut place is fixed according to its distance from the camber of the previous cuts and its symmetry on the right and left sides and according to the lines of the angular folds.

After designing the incision line, the abdominoplasty procedure begins. The most important issue in the final form of abdominoplasty surgery is how to remove excess skin. The symmetry of the initial cut does not guarantee the final result, because if the initial cut is supposed to be symmetrical, but the skin is not removed symmetrically and uniformly on both sides, the final result of the cut will not be symmetrical. On the other hand, the skin on the right and left sides of the abdomen are not symmetrical, and it is often seen that the skin on one side of the abdomen is more and more sagging than the skin on the other side. In order to solve this problem and in the final stages of the surgery, first the skin above the navel is stitched to the skin of the Munz area with a stay suture (Figure-3).

After this stage, the middle line is carefully determined and a line is drawn perpendicular to it at the next navel. The perpendicularity of this line is very important (Figure-3).

After this, on each side, three or four lines are drawn at a distance of 4 to 5 cm from each other, parallel to the middle line, perpendicular to this transverse line (Figure-4).

In the next step, the amount of skin that will be removed is designed on one side, and then the distance of this design is marked on the opposite side with the help of vertical lines from the determined horizontal line of the eye (Figure-4).

Finally, with the help of the obtained points, the design of removing the skin of the glasses is drawn on the opposite side, and in this way, a symmetrical pattern will be obtained (Figure-5).

After this step, the skin on both sides is removed, the operation continues with the restoration of the layers of the abdomen and finally the skin (Figure-6).
DISCUSS
Abdominoplasty or abdominoplasty is one of the most common cosmetic surgeries and since 1899 when Kelly introduced his incision and method to perform this procedure, there have been many changes in the surgical technique and its incision. Currently, cosmetic surgeons perform abdominoplasty incision as low as possible and in the lower abdominal fold.

One of the factors that determine the beauty of the abdominoplasty procedure is the shape and location of the surgical incision. The cut of this operation and the method of removing the excess skin should be in such a way that the final surgical cut has a uniform shape and shape, smooth and without deformity.

So far, various methods and incisions have been designed to perform this procedure. One of these methods is Potter’s triangulation method, which mainly focuses on the symmetry and uniformity of the lower edge of the cut. Of course, Potter's method is a bit difficult and time-consuming. In comparison, learning and implementing the method described in this article is very simple and fast. This method focuses not only on the symmetry and symmetry of the lower edge of the cut, but also mainly on the symmetry and symmetry of the upper edge of the cut, and for this reason, using this method, the final shape of the cut will be symmetrical and uniform.

REFERENCES