# The implication of the abdominal wall lymphatic pattern on postoperative sequelae of abdominoplasty

### **Thesis**

Submitted for partial fulfillment of M.D. degree In plastic surgery

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### **Abstract**

The traditional abdominoplasty showed increase in the incidence of seroma than Scarpas fascia preservation abdominoplasty.

The study showed no relation between degree of abdominal deformity and the time of drain removal, the p value is not significant.

The study showed no relation between degree of abdominal deformity (excess adipose tissue) and the time of drain removal, the p value is not significant.

The relation between age and time of removal of drain showed non significant weak positive correlation. There is increase in the incidence of complication in group (A) as seroma and wound infection more than in group (B). The insignificant p value may be either due to the absence of actual difference or due to the small number of the sample.

The lymphatic vessels of anterior abdominal wall could be visualized to be drained into supra Scarpa lymphatic ending at the inguinal lymph node till the level of the umbilicus at the same time lymphatics of the central part of the anterior abdominal wall drained along the perforator down to the rectus muscle.

This results pointed out that there is positive correlation to the lower incidence of seroma in scarpas fascia preservation abdominoplasty than traditional.

#### **Keywords:**

- Abdominal wall lymphatic
- Pattern on postoperative sequelae of abdominoplasty

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# Introduction

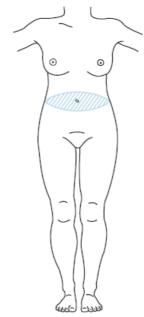
### **Introduction**

Abdominoplasty is one of the most common plastic surgical procedures which are performed. This is the procedure that rejuvenates the abdomen after childbearing, abdominal surgery, and significant weight loss. (Peter et al., 2010).

Despite the advent and popularity of liposuction, which surely is less invasive and offers a more rapid recovery, abdominoplasty has undergone a significant evolution over the past several decades and still represents nowadays a widely performed procedure.(Melvin , 2010)

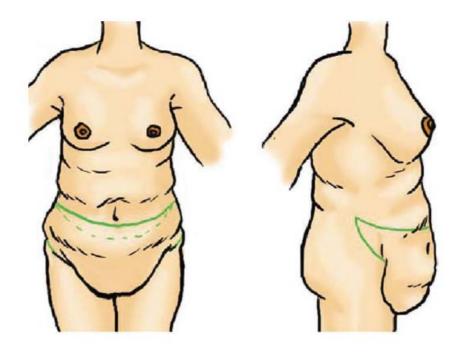
Body contouring procedures which started early in the twentieth century. It was consisted of dermatolipectomies of hanging abdominal panniculi. In these procedures, excess skin and underlying fat were removed to remove the hanging tissues with minimal attention to aesthetic principles. (AL Aly, 2007)

It is very difficult to identify the "father" of this procedure but surely there were many surgeons started to perform dermolipectomies of the abdominal wall to correct obesity and to facilitate herniorraphy to repair umbilical hernias The American history of abdominoplasty begins with Kelly's first report in 1899, .in which he coined the term 'abdominal lipectomy.' During this first procedure, lower abdominal tissue was excised much as one 'takes a slice lengthwise of a watermelon. This transverse wedge excision of skin and subcutaneous tissue, with possible hernia repair, was performed without undermining. (Kelly,1899)



Figure(1): Kelly technique (Kelly, 1899)

Prior to that, in 1890, the French surgeons Demars and Marx had performed significant skin and fat resection from the abdomen.(*Kelly*, 1899)



Figure(2): Limited dermolipectomy, Demars and Marx(Kelly,1899)

In 1916, Babcock was the first to report vertical elliptical resection with wide undermining of the abdominal wall. He described a vertical elliptical incision along the length of the abdomen. He also dealt with the abdominal wall laxity with the buried silver chain technique. (Babcock, 1916)

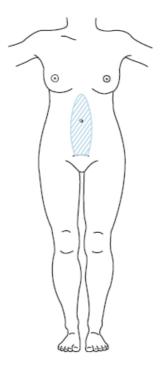


Figure (3): Babcock technique (Babcock, 1916)

In 1918, Schepelmann modified the Babcock elliptical incision into a transverse teardrop incision extending from the xyphoid to the pubis. This allowed for more contouring of the lower abdominal excess. (Schepelmann, 1918)