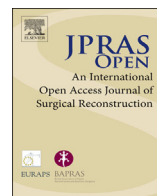




Contents lists available at ScienceDirect

JPRAS Open

journal homepage: <http://www.journals.elsevier.com/jpras-open>



## Case Report

# Incisional abdominal hernia repair with concomitant abdominoplasty: Maintaining umbilical viability

Robert Phan <sup>a,\*</sup>, Elan Kaplan <sup>a</sup>, Jemma K. Porrett <sup>b</sup>,  
Yik-Hong Ho <sup>b</sup>, Warren M. Rozen <sup>a,b</sup>

<sup>a</sup> Department of Surgery, Faculty of Medicine, Monash University, Clayton, Victoria, Australia

<sup>b</sup> Discipline of Surgery, School of Medicine, James Cook University, Townsville, Queensland, Australia

## ARTICLE INFO

### Article history:

Received 1 July 2017

Accepted 21 September 2017

Available online 9 April 2018

### Keywords:

Abdominoplasty

Hernia repair

Umbilical viability

Laparoscopic

Mesh

## ABSTRACT

**Introduction:** Abdominoplasty and abdominal hernia repair are often carried out in two-stage procedures, and those describing single-stage surgery require careful dissection to preserve often only partial blood supply to the umbilicus to maintain its viability. This paper aims to describe the surgical method of laparoscopic umbilical hernia repair in association with abdominoplasty.

**Case presentation:** A patient presents with an incisional hernia at a previous periumbilical port site of size 14 x 9 mm observed on ultrasound as well as a recurrent left inguinal hernia from previous bilateral laparoscopic inguinal hernia repair, oophorectomy, and laparoscopic cholecystectomy. A laparoscopic mesh repair of the hernia defect followed by abdominoplasty was performed. The patient made an uncomplicated recovery and was discharged home on day 5 post operation. There was complete healing of the umbilicus and remainder of the wounds. At 24-month follow-up, there was no recurrence of hernia.

**Conclusion:** Previously documented methods of concomitant abdominoplasty and hernia repair use an open technique to repair the hernia. A laparoscopic approach is faster, but it poses a significant risk to the vascular supply to the umbilicus. This not only

### Compliance with Ethical Standards

The authors have no potential conflicts of interest.

The authors have no sources of funding to disclose.

The patient has given informed consent for the use of nonidentifiable images and case presentation in this manuscript.

\* Corresponding author. Department of Surgery, Faculty of Medicine, Monash University, Clayton, Victoria, Australia.

E-mail address: [robert\\_phan@hotmail.com](mailto:robert_phan@hotmail.com) (R. Phan).

<https://doi.org/10.1016/j.jpra.2017.09.002>

2352-5878/© 2017 The Author(s). Published by Elsevier Ltd on behalf of British Association of Plastic, Reconstructive and Aesthetic Surgeons. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

increases positive aesthetic outcomes and patient satisfaction but also reduces rates of postoperative complications and recovery time.

© 2017 The Author(s). Published by Elsevier Ltd on behalf of British Association of Plastic, Reconstructive and Aesthetic Surgeons. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## Introduction

Since the first documented abdominoplasty more than a century ago, the procedure has evolved significantly.<sup>1</sup> Major improvements in aesthetics are credited to Thorek, who documented the first umbilicus-preserving abdominoplasty in 1924.<sup>2</sup>

The procedure continues to become increasingly popular, and this is attributed to the increasing rates of obesity and subsequent use of weight loss surgery in Australia, with a significant 34-fold increase in Australians undergoing weight loss surgery.<sup>3,4</sup>

Obesity has also been shown to contribute to skin and fascial laxity and subsequently abdominal wall hernias.<sup>5</sup> With the increasing popularity of bariatric surgery, cases of postoperative complications such as incisional, umbilical port site, and ventral hernias are increasing, with some studies reporting postoperative hernias in up to 13% of patients who have undergone abdominal surgery.<sup>6</sup>

At the time of abdominoplasty, surgeons have the choice of concomitant hernia defect repair; however, such a procedure is not without the risk of umbilical necrosis due to the disruption of both the superficial and deep blood supply to the umbilicus. When undergoing a classical abdominoplasty, a circumferential incision is made around the umbilicus to free it from the surrounding skin, thereby disrupting the cutaneous supply from the subdermal plexus to the umbilicus. The umbilicus remains viable because of its deep blood supply from perforators arising from the umbilical branch of the deep inferior epigastric artery. However, classical open abdominoplasty and concomitant hernia repair pose severe risk to deep blood supply to the umbilicus.

We present an approach to this clinical problem that was highlighted in a case report in which a patient presents with an incisional hernia at her umbilical port as well as a recurrent left inguinal hernia. A laparoscopic mesh repair of her previous port site incisional hernia and concomitant abdominoplasty with umbilical transposition was carried out, without umbilical necrosis.

## Case report and surgical technique

The patient, who had presented initially after weight loss achieved by nonsurgical means with excess abdominal tissue in conjunction with an incisional hernia and inguinal hernia (Figure 1), was marked preoperatively for skin incisions in the supine position. Once completed, the patient was administered with a general anesthetic agent. A transverse left groin incision was made in a manner such that the incision could also be used for the abdominoplasty approach. The recurrent inguinal hernia was repaired using a standard plug and patch technique. The deep ring was plugged and closed with a PerFix plug. A flat piece of ProGrip was trimmed and placed in the inguinal canal. A single suture anchored the mesh to the pubic tubercle. A 2-cm overlap from the pubic tubercle and 5 cm beyond the deep ring was allowed. The external oblique fascia was then closed.

Laparoscopic ports were inserted within the markings for skin incision to facilitate access, thus enabling no further scars. A 12-mm optical trocar was inserted under vision in the left flank. Two 5-mm ports were then inserted under vision. Multiple adhesions were divided. The omentum within the hernia was reduced. A 9-cm-diameter Parietex™ Composite polyester mesh was used to cover the defect. This was secured with 2/0 prolene transfascial sutures using an Endo Close and multiple firings of SecureStrap. All these procedures were performed laparoscopically.

The approach for abdominoplasty was executed as per routine markings, with these planned along the incisions that had been made to repair the hernia. The fascial basis for the umbilical blood supply

Download English Version:

<https://daneshyari.com/en/article/8836254>

Download Persian Version:

<https://daneshyari.com/article/8836254>

[Daneshyari.com](https://daneshyari.com)