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ISSN 2348-0416
USA CODEN: JASRHB

Journal of Applied Science And Research, 2015, 3 (6):1-6

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Abdominoplasty and prosthetic repair of large abdominal hernias Preliminary results of a prospective study

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ABSTRACT

Introduction: The hernias of the abdominal wall covered with surgical treatment. Several surgical techniques have been proposed to correct the parietal defect at first, then the excess damaged skin in a second time.Materials and methods: We prospectively studied the contribution of the addition of two techniques to handle large unsightly abdominal hernias. We evaluated operative time, hospital stay, postoperative complications, recurrence rates, cosmetic outcome and satisfaction.Results: The results obtained in this study of 23 patients were recruited an average procedure time of 3 hours and a half, an average hospital stay of five days, the rate of postoperative complications of 4.35%, a rate of recurrence 4.35% and a satisfaction rate of 91.30%.Conclusion: The plasty intraperitoneal plate associated with the abdominoplasty is a well tolerated technique, reproducible, easy to learn and comes with a low rate of postoperative complications and recurrence.

INTRODUCTION

The hernias of the abdominal wall are dehiscence of musculo-fascial plane. These are often complications encountered with the waning laparotomy with an incidence ranging between 2 and 10% [1]. When large and associated with unsightly excess skin and fat, they ask many therapeutic difficulties. We must therefore respond to a dual objective: the mechanical bridging the parietal defect with restoring a normal pattern of abdominal strap one hand, and the correction of excess damaged skin on the other. Hence the need to combine a pariétoplastie by intraperitoneal plate and a tummy tuck. The aim of our prospective study was to evaluate the duration of surgery, hospital stay, postoperative complications, recurrence rates, cosmetic outcome and satisfaction.

MATERIALS AND METHODS

This is a prospective study in a group of 23 patients enrolled and operated between January 2013 and December 2013 in cooperation between the General Surgery and Plastic Surgery Department of Avicenne Military Hospital in Marrakech.

We included in our study, the collar of the eventrations exceed 10 cm in the longest axis that is a first episode of disembowelment or recurrence, and were excluded from this study and the complicated incisional hernias diastasis.

The average age in our study was 45 years (30-57 years), obesity was the most important comorbidity factor and it was found in 10 of our patients with a BMI> 30. Other co-morbidities were raised such as diabetes, hypertension and asthma (Table I). The surgical history of our patients are dominated by cesarean section in 16 cases (Table II). The Pfannenstiel incision was found in 12 cases (Table III). The average diameter of the hernia was 11.2 cm (10-15 cm), and it was appreciated by clinical examination and measured by abdominal CT which allowed also to study the abdominal wall, the collar the disembowelment, its location and content. Before considering surgery, we require comprehensive information on possible results and the operating risks while allowing time for reflection and conviction. Preoperative preparation is necessary with several consultations: consultation with a dietary slimming cure and monitoring the weight curve in patients with a BMI> 30, a systematic respiratory evaluation (EFR), a pre-anesthetic consultation, diabetology consultation for a balance of compulsory diabetes. The day before and the morning of surgery, we ask a shower at the Betadine. Antibiotic prophylaxis is systematic, and the prevention of thromboembolic disease is mandatory in intraoperative and postoperative with the administration of the low molecular weight heparin (LMWH), wearing stockings and Trendelenburg position. Finally, we expect an abdominal compression sleeve according to the waistline.

The surgical technique combines classic abdominoplasty with transposition of the umbilicus and a bifacial pariétoplastie per plate (composite Parietex®). The dimensions of the double-sided plate are still largely superior to the neck of the hernia. The recovery of the prosthesis can be sutured fascial whenever action is feasible without tension or after plasty musculoaponeurotic (Figure 1). The first up is recommended after 24 hours and removal of suction drains after 48 hours. The pace of follow-up was set at 2 times / week until healing at six weeks (dry period edema) in three months with restraint belt wearing, at 6 months and 1 year.

Table I: Table indicating the comorbid conditions in patients of the study

	Number of cases	Percentage
BMI> 3	10	43,48%
Type 1 diabetes	9	39,13%
hypertension	6	26%
Asthma	1	4,35%

Table 2: Table indicating the surgical history of patients in the study

Previous surgical indications	Number of cases
caesarean	16
Eventration	6

Hernia (HO, HLB)	4
Bowel obstruction	1
Cholecystectomy / laparoscopy	4

Table 3: Table showing the types of previous incisions in the patients of the study

Types of incision	Number of cases
Pfannenstiel	12
Median infraumbilical	8
Supraumbilical median	2
Median xypho-pubic	1

RESULTS AND DISCUSSION

The average intervention duration was 3 and a half hours (2h30 - 5h) .The average hospital stay was 5 days (3-15j). Complete healing is achieved after 15 to 35 days. Postoperative morbidity rate was 4.35% (1 case / 23) infection of the declared wall in a diabetic patient to j + 10 which has been controlled by appropriate antibiotic therapy associated with necrosectomy which allowed the healing after 35 days (Figure 2). The recurrence rate was 4.35% (1 case / 23): suprapubic recurrence of hernia (Figure 3) occurs eight months postoperatively in a patient with a BMI of 42 and that has been treated by intraperitoneal plate infraumbilical. Aesthetic and functional result was satisfactory in 91.30% of cases (Figure 4).

Comment

Abdominoplasty surgery was one of the interventions of the popular figure in obese subjects [2, 3, 4]. Currently, it can be associated with pariétoplastie when it adds a hernia that will require a specific repair. Our work provides the first prospective study that evaluated the results of the combination of two surgical techniques in the treatment of large incisional hernias da abdominal wall. Each technique has a certain rate of postoperative complications and far. The improvement of abdominoplasty techniques has largely democratized support alterations in the abdominal wall. The postoperative are simpler and complications supported by more appropriate manner. [5] In our study, the addition of these two techniques was not grafted additional complications or a higher recurrence rate.

CONCLUSION

The pariétoplastie intraperitoneal plate associated with the tummy tuck is a well tolerated technique, reproducible, easy to learn and comes with a low rate of postoperative complications and recurrence.

Before the small decline in our study, other larger prospective studies are needed to confirm our data.

Conflict of interest
The authors declare no conflict of interest.

Author Contributions
All authors contributed to the writing of this manuscript and read and approved the final version.

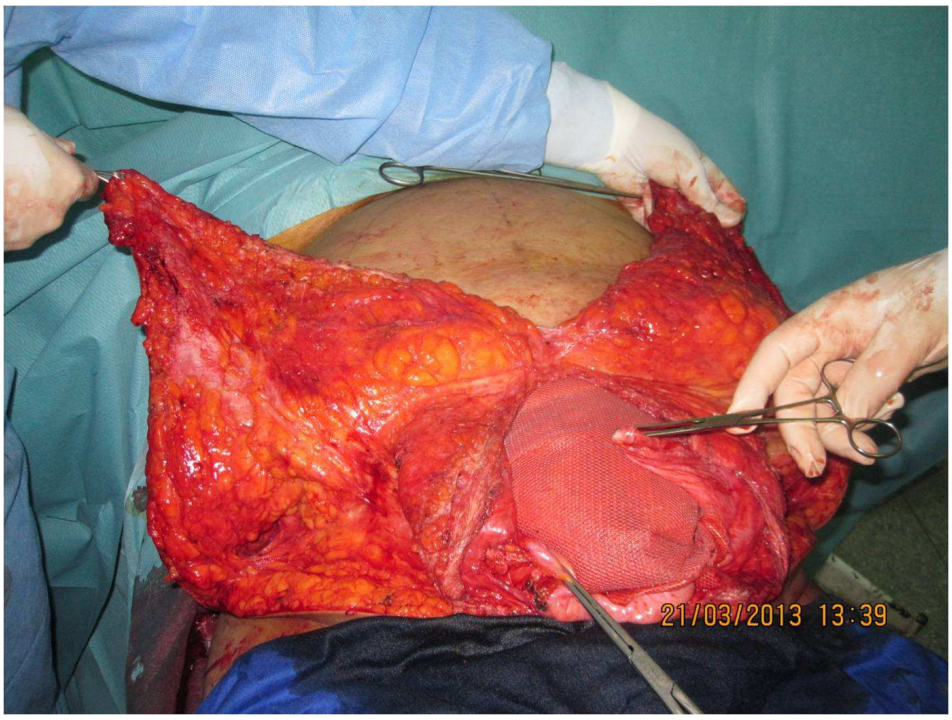

Figure 1: intraoperative aspect of a recovery attempt by the prosthesis fascial suture

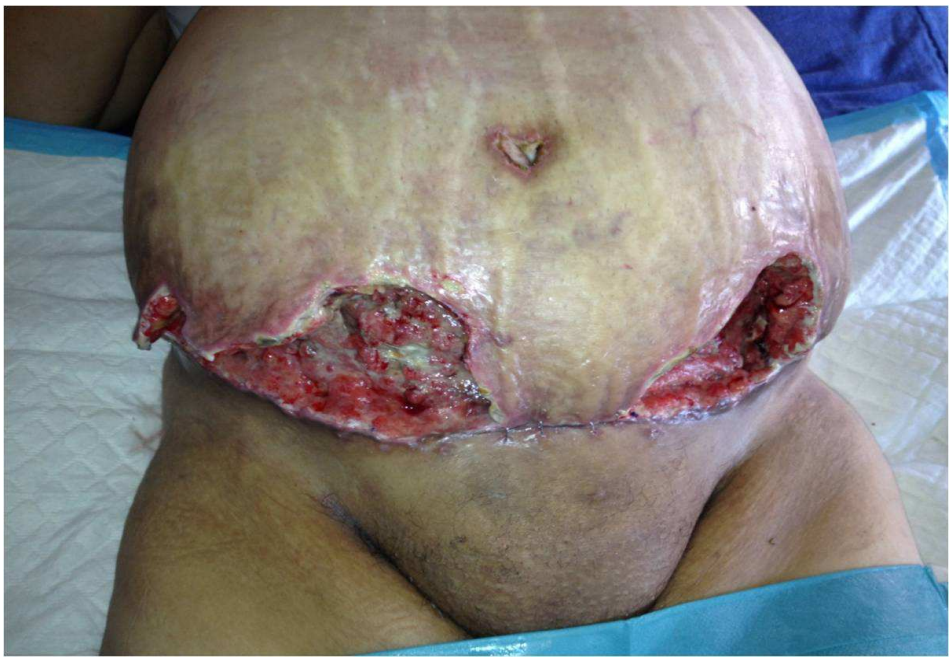

Figure 2: Appearance of a wound infection with partial skin necrosis in a diabetic patient treated with appropriate antibiotic therapy associated with necrosectomy

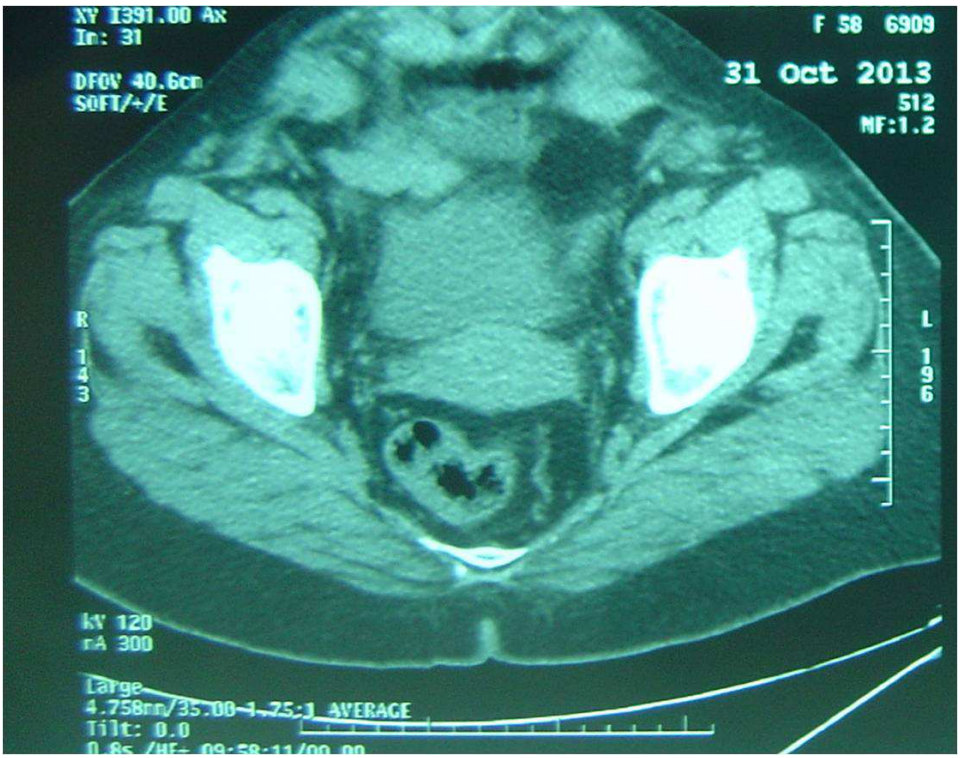

Figure 3: CT appearance of recurrent hernia in suprapubic

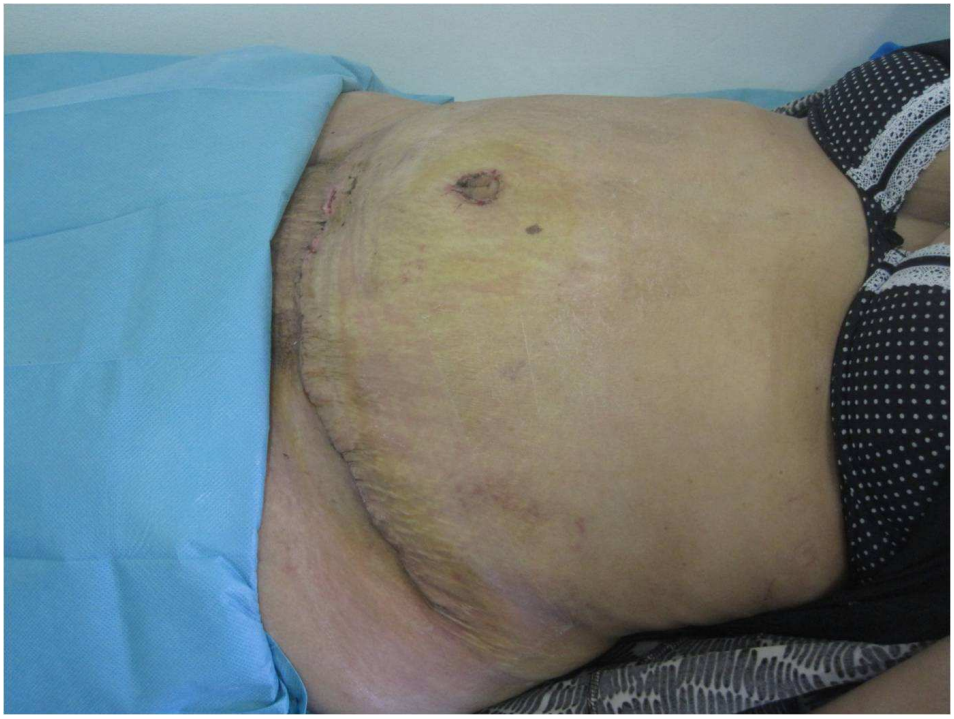

Figure 4: Postoperative appearance from an aesthetic and functional result satisfactory

REFERENCES

[1].Mudge M, Hughes L.E. Incisional hernia. A 10 year prospective study of incidence and attitudes. Br J Surg **1985**;72:70-71.
[2]. Strauch B, et al. Mid-body contouring in the post-bariatric surgery patient Plast Reconstr. Surg **2006**;117(7):2200-11.
[3].Araco A, et al. Postbariatric patients undergoing body-contouring abdominoplasty: two techniques to raise the flap and their influence on postoperative complications. Ann Plast Surg **2009**; 62(6):613-17.
[4]. Sanger C, David L.R. Impact of significant weight loss on outcome of body-contouring surgery. Ann Plast Surg **2006**;56(1):9-13.
[5]. Chaput B, Chavoin J.-P, Garrido I,. Grolleau J.-L, Méresse T. Dermolipectomie abdominale et dermolipectomie totale circulaire. **EMC** - Techniques chirurgicales - Chirurgie plastique reconstructrice et esthétique **2014** [45-675].