



Ain Shams University
Faculty of Medicine
General Surgery Department

Recent Trends In Abdominoplasty

Essay

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Presented by

Ahmed Mohamed Rashad
M.B.B.CH.

Under supervision of

Prof. Dr. Hassan Zakaria Shaker

*Professor of General surgery
Faculty of medicine-Ain Shams University*

Prof. Dr. Ahmed Mohamed Nafei

*Assistant Professor of General Surgery
Faculty of Medicine-Ain Shams University*

Dr. Sameh Saeid Abu Elela

*Lecturer of General surgery
Faculty of Medicine-Ain Shams University*

Faculty of Medicine
Ain Shams University

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كلية الطب
قسم الجراحة العامة
جامعة عين شمس

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توطئة للحصول على درجة الماجستير فى
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مقدمة من

الطبيب/ أحمد محمد رشاد

تحت اشراف

ا.د / حسن زكريا شاكر

استاذ الجراحة العامة

كلية الطب- جامعة عين شمس

ا.د / أحمد محمد نافع

استاذ الجراحة العامة

كلية الطب- جامعة عين شمس

د/ سامح سعيد ابو العلا

مدرس الجراحة العامة

كلية الطب- جامعة عين شمس

كلية الطب

جامعة عين شمس

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✍ Ahmed Mohamed Rashad

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالَ

لَسْبَحَانَكَ لَا عِلْمَ لَنَا
إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْعَظِيمُ

صدق الله العظيم

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Contents

Subjects	Page
• List of Abbreviation.....	I
• List of figures.....	II
• List of tables.....	III
• Introduction	1
• Aim of the work.....	3
• Review of literature :	
- Chapter (1): Anatomy of The Anterior Abdominal Wall.....	4
- Chapter (2): Aesthetics of abdomen.....	30
- Chapter (3): Pre-operative Classification.....	35
- Chapter (4): Traditional Techniques in Abdominoplast.....	46
○ Liposuction	46
○ Full Abdominoplasty	56
- Chapter (5): New Techniques in Abdominoplasty ..	75
○ Endoscopically Assisted Abdominoplasty	76
○ Lipoabdominoplasty.....	85
○ Reverse Abdominoplasty	100
○ Tensioned Reverse Abdominoplasty	108
○ The High-Superior-Tension Technique.....	118
○ High lateral tension.....	132
○ Fleur de lis.....	138
○ Umbilicoplasty	146
• Chapter (6): Prevention and Management of Complications.....	154
• Summary	180
• Conclusion	185
• References	186
• Arabic summary	

List of Abbreviations

ASIS	:	Anterior superior iliac spine
BMI	:	Body Mass Index
CBC	:	Complete blood count
DIEAs	:	Deep inferior epigastric arteries
DVT	:	Deep venous thrombosis
ECG	:	Electrocardiogram
HSTA	:	High superior tension abdominoplasty
SAL	:	Suction assisted lipectomy
SFS	:	Superficial Fascial system
WRAP	:	Wide rectus abdominis muscle plication

List of Tables

Table	Description	Page no.
Table 1	The difference in male and female characteristics of the abdomen.	34
Table 2	Pitanguy's classification of aesthetic abdominal deformities.	36
Table 3	Abdominolipoplasty classification system by Matarasso.	37
Table 4	Minimal access subtypes of the abdominolipoplasty system.	38
Table 5	classification of abdominoplasty according to the need for vertical scar	41
Table 6	Volumes of tumescent fluid required per body area.	52
Table 7	Classification of abdominoplasty complications	56

List of Figures

Figure no.	Description	Page no.
Fig. 1	Embryo at 12 weeks at time of abdominal wall formation.	5
Fig. 2	Anatomical layers of abdomen wall	7
Fig. 3	Zones of adherence	8
Fig. 4	superficial fascia of anterior abdominal wall	10
Fig. 5	External Oblique and Internal oblique Muscles	13
Fig. 6	Transversus abdominis Muscle	14
Fig. 7	Rectus sheath layers	18
Fig. 8	Muscles of the Anterolateral Abdominal Wall	18
Fig. 9	Zones of abdomen according to blood supply	20
Fig. 10	The arterial supply of anterior abdominal wall	24
Fig. 11	Superficial Veins and Cutaneous Nerves of the Anterior Abdominal wall	25
Fig. 12	Lymphatic drainage of anterior abdominal wall	29
Fig. 13	Nerve supply of anterior abdominal wall	29
Fig. 14	The seven aesthetic units of female abdomen	31
Fig. 15	The six aesthetic units of male abdomen	33
Fig. 16	Abdominolipoplasty System of Classification by Matarasso	38
Fig. 17	Minimal-access variations in abdominoplasty	39
Fig. 18	Type 1 abdominoplasty	42
Fig. 19	Type 2 abdominoplasty	42
Fig. 20	Type 3 abdominoplasty	43

Figure no.	Description	Page no.
Fig. 21	Type 4 abdominoplasty	43
Fig. 22	Type 5 abdominoplasty	44
Fig. 23	Topographic markings used preoperatively to mark the areas of excess adiposity	49
Fig. 24	Patient Positioning arms at no greater than 90 degrees. The knees flexed, and antiembolism support stockings	51
Fig. 25	clinical signs of appropriate infiltration	54
Fig. 26	recognition of asymmetry and fatty lumps	51
Fig. 27	38-year-old woman is shown before and 6 months after liposuction of the abdomen, hips	55
Fig. 28	appropriate patient for standard abdominoplasty	57
Fig. 29	Marking of traditional abdominoplasty	60
Fig. 30	the required abdominoplasty marks the lower transverse incision	61
Fig. 31	The lower transverse incision line is injected	62
Fig. 32	a low transverse incision is made sharply into but not through the dermis.	64
Fig. 33	The superficial inferior epigastric vessels are often easily visualized	65
Fig. 34	Umbilicus is vertically incised	66
Fig. 35	The dissection continues to the costal margins, using electrocautery to seal all perforating vessels.	67

Figure no.	Description	Page no.
Fig. 36	Markings are made to identify the medial border of the rectus diastasis and to delineate the second plication layer	68
Fig. 37	Incision of external oblique aponeuroses and direction of advancement.	69
Fig. 38	the lower abdominal flap is incised longitudinally	69
Fig. 39	A full-thickness resection is then performed	71
Fig. 40	(A, B) the subscarpal fat is easiest to delineate from Scarpa's fascia laterally, sharp dissection is recommend. (C) In the midline, the delineation of the Scarpa's fascia and fat is less distinct	72
Fig. 41	the patient is placed into a modified jackknife position prior to skin closure	74
Fig. 42	43-year-old woman. Full abdominoplasty with myofascial plication and liposuction is done	79
Fig. 43	Markings of endoscopic abdominoplasty are performed with the patient standing	80
Fig. 44	The umbilicus is released via a complete circumumbilical incision	82
Fig. 45	Myofascial plication above the umbilicus is performed using the endoscope and under direct visualization below the umbilicus	82
Fig. 46	Endoscopic view	83
Fig. 47	Rectus plication with barbed suture	83

Figure no.	Description	Page no.
Fig. 48	Supraumbilical rectus diastasis	84
Fig. 49	Preoperative markings for lipoabdominoplasty estimated Skin resection area, The Baroudi bicycle handlebar incision and the liposuction areas	88
Fig. 50	Skin markings showing the liposuction areas marked in blue	89
Fig. 51	Superior abdominal liposuction	90
Fig. 52	Lower abdominal liposuction	91
Fig. 53	The flap descent evaluation	92
Fig. 54	Perforating vessels and Scarpa's fascia preservation	92
Fig. 55	Preservation of Scarpa's fascia and partial deep fat	93
Fig. 56	Lipoabdominoplasty preserves vascular perforators	94
Fig. 57	Selective undermining, diastasis demarcation, preservation of the Scarpa's fascia	95
Fig. 58	Umbilicoplasty in thin patients.	96
Fig. 59	The final incision is closed in two layers	98
Fig. 60	Pre- and postoperative views	99
Fig. 61	The preoperative marking for reverse abdominoplasty	103
Fig. 62	The segment of soft-tissue laxity identified preoperatively can be resected or de-epithelialized.	105

Figure no.	Description	Page no.
Fig. 63	Pre- and postoperative photographs of a 44-year-old woman who underwent a reverse abdominoplasty	107
Fig. 64	V-shaped flap and undermining to the level of the umbilicus.	112
Fig. 65	Incomplete inframammary incision limited to the base of the breasts.	112
Fig. 66	Traction lines and midline fascia plication	115
Fig. 67	Progressive and continuous tension sutures toward the inframammary incision.	116
Fig. 68	Tensioned reverse abdominoplasty was performed	117
Fig. 69	The epigastric pinch test.	120
Fig. 70	Liposuction (in the hypogastrium: deep and laterally)	124
Fig. 71	Epigastric dissection staying deep on the muscular fascia	126
Fig. 72	the new umbilical site.	127
Fig. 73	In executing the high superior tension technique, 2 traction sutures placed at 3- and 9-o'clock	128
Fig. 74	high superior tension abdominoplasty	132
Fig. 75	HLT abdominoplasty pattern	135
Fig. 76	HLTA with liposuction of the hips and thighs	137
Fig. 77	A fleur de lis	138

Figure no.	Description	Page no.
Fig. 78	Illustration of initial full abdominoplasty markings	141
Fig. 79	A “pinch test” is performed along the superior border	142
Fig. 80	an inverted “V” or triangle is drawn on the upper abdominal midline.	142
Fig. 81	Postoperative views 6 months after circumferential fleur-de-lis abdominoplasty	145
Fig. 82	Reinsitting of umbilicus	147
Fig. 83	The undersurface of the abdominal flap in the periumbilical area can also be defatted.	149
Fig. 84	Different methods for umbliconeoplasty	153
Fig. 85	Aspiration of seroma	159
Fig. 86	formal evacuation and attempts to identify the source	161
Fig. 87	Patients who have experienced full-thickness soft-tissue necrosis	162
Fig. 88	Mild umbilical stenosis can be corrected by performing multiple Z-plasties along the stenotic rim	171

Introduction

The abdomen plays a leading role in the aesthetic image of the human body, and is of prime importance in defining the overall contour of the individual. The form of the abdomen is defined by skeletal structure, quantity and distribution of fat, appearance and condition of the skin, tonus of the aponeurotic and muscular system and the protrusion of the intra- abdominal organs. Each of these components constitutes an independent variable within the diagnosis of deformity of the abdomen and will determine the type of treatment (*Pitanguy and Radwanski, 2005*).

The abdominoplasty encompasses not only aesthetic body contouring but also reconstruction of structural integrity. The aesthetic goals of abdominoplasty are to improve the contour of the abdominal wall, to minimize scarring and to maintain a natural-appearing umbilicus. The reconstructive goals are to re-establish the appropriate anatomy of the muscular layer and to prevent recurrence of hernias or diastasis (*Vasconez and De La Torre, 2006*).

Abdominal contour deformities represent the most common complaint among massive weight loss patients presenting for plastic surgery. According to the American Society of plastic Surgeons, abdominoplasty is the fifth most common cosmetic surgical procedure (*Friedman et al., 2010*).

Abdominoplasty, as first described by Kelly in 1899, has undergone various iterations over the years. Changes in

the methods of incision, fixation of abdominal skin and fat, excisional design, and the removal of excess fat by liposuction have led abdominoplasties to become one of the most commonly performed aesthetic procedures in the United States (*Samra et al., 2010*).

Since that time, numerous variations of the procedure have been performed. In 1967, Callia described the first report of aponeurotic suturing with a low incision that extended below the inguinal crease. Regnault described the W technique for abdominoplasty in 1972. In 1973, Grazer published his work on the so-called bikini line incision. With the addition of liposuction in combination with abdominoplasty, described by Matarasso in 1988, surgeons were able to perform more personalized abdominal contouring surgery within patients' variable anatomy (*Spiegelman and Levine, 2005*).

Attempts at classifying the types of abdominal deformity have been made by Bozola and Psillakis. In addition, Matarasso classified the type of abdominoplasty procedure as mini, modified, or full abdominoplasty (*Neaman et al., 2013*).

Due to the wide and diversified range of cosmetic problems involving the abdominal wall, a great number of techniques were simultaneously created, improved, discarded and recovered with a view to reducing surgical aggressiveness, improving the quality of the results and allowing reproducibility by experienced hands (*Baroudi, 2009*).