New Concepts on Abdominoplasty and Further Applications
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Foreword

Body contour deformities have kept plastic surgeons busy since the beginning of our specialty. Indeed, the simple resection of excess skin from the lower abdomen can be cited as the first true dermolipectomy. The aim initially was simply to eliminate unwanted weight and skin folds, and alleviate complaints such as bad posture and skin rash. As fashion changed, especially swimwear, the female body became more revealed, and surgeons had to adapt their approach to keep scars hidden and less extensive. Plication of the rectus abdominis muscles allowed for correction of weakness of the abdominal wall. This reinforcement, done by plication of the rectus abdominis muscles without opening of the fascia, was emphasized by myself when I published my own approach, in 1967, and assured a return of function to a flaccid abdominal wall. With the advent of suction-assisted lipectomy, the surgeon was finally able to sculpture the abdominal region, including the flanks and posterior torso.

Currently, as this book attests, we have witnessed the revival of those procedures, mainly in patients who have undergone great weight loss. Here the reader will find all the different approaches, clearly presented by surgeons who are leaders in their field of work. I am certain that this book will prove to be an important contribution to plastic surgeons who intend to correct abdominal deformities, and I congratulate Dr. Juarez M. Avelar and his co-authors for their effort and dedication.

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Abominoplasty is one of the most common surgical procedures in our specialty. Since many years ago, several techniques have been described to correct localized adiposity, skin flaccidity, and rectus diastasis. And many new advances has been published during the last years as we have seen in this outstanding book edited by Dr. Juarez M. Avelar, representing one of the most important surgeons from Brazil in this field of body contouring.

Dr. Avelar has published many papers about abdominoplasty, but three of them have been considered landmarks in body contouring. The first one was published in 78 [1] in one of the first Aesthetic Plastic Journal issues about his “Mercedes” umbilicoplasty without external scar. At that time, it was a great contribution and is nowadays extensively used by many surgeons. The second paper was an extensive histo-anatomical research done in the subcutaneous abdominal fat. This study allowed all of us to understand the panniculous adiposity levels and the neurovascular bundles of the abdomen wall, and it was the first step to open the window to the lipoadabdominal techniques. This was published in the APS Journal in 1989 [2] about abdominal lipodystrophy earning from the Aesthetic Plastic Surgery Journal (ISAPS official journal) the first prize for outstanding research paper in the Year of 1988.

The third one and certainly the most important paper was presented and published in 1999 [3–5] and in 2000 [6] – and so the lipoadominoplasty technique started a new era for body contouring surgery.

The contribution to the lipoadbdominoplasty technique of Dr. Avelar is unquestionable combining assisted liposuction without undermining the abdomen wall, preserving Scarpa’s fascia. From this principle, many other surgeons started with similar procedures like Doctors Ricardo Baroudi [7], João Erfon, Farid Hakme [8], Ronildo Storck, Oswaldo Saldanha [9], Sebastião N.Guerra [10], Carlos Uebel [11–14], Claudio Cardoso [15], etc. – only to give a few of them.

Other important chapters can be appreciated in this book – the “history of abdominoplasty” by Dr. Ramil Sinder describing different techniques published in the last 100 years, to post-bariatric surgeries and other approaches to the abdomen wall. And at least the chapter of Dr. Marco Aurelio Faria Correa describing the robotic approach – a pioneer in this field. Dr. Correa started many years ago using
the endoscopy approach to rectus diastasis abdomen wall plication and now surpirsing us with this new tool – really something for the modern surgical practice. His ability to play with this equipment will certainly improve many other procedures in the future.

This book is a reference for experienced plastic surgeons but certainly a remarkable textbook for residents and young plastic surgeons who want to learn and to get new approaches and techniques written by an outstanding faculty group from our country and abroad. Pictures and drawings are of excellent quality, and I can congratulate Dr. Juarez M. Avelar and all their contributors for the excellence of the chapters. Really, this is a book to keep in our libraries forever.

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Preface

Upon my postgraduation study with Professor Ivo Pitanguy at 38th Infirmary of Santa Casa da Misericodia, and also I was resident at his Clinic of Plastic Surgery in Rio de Janeiro, I took an important decision to visit other renowned professors of plastic surgery. So during one year, I was in fellowship with Ralph Millard (Miami University), John Converse, Thomas Rees, Blair Rogers (New York University), Paul Tessier (Foch Hospital), Claude Dufurmentel, Roger Mouli (Saint Louis Hospital), Raul Tubiana (Victor Hugo Clinic) all in Paris (France), Davis Mathews at Children Hospital in London (England), John Mustarde, Chanisburn Hospital in Glasgow (Scotland). So, after 4 years of training and fellowship, I concluded that aesthetic surgery of the abdomen wall still presented some surgical problems as well as some challenges ever since Kelly in 1899 published the first abdominoplasty. Although remarkable contributions were introduced to this field until 1974 when I started my professional activities, I felt that some topics still posed challenges to all plastic surgeons.

Nevertheless, the new umbilical region after abdominoplasty quite often used to be ungraceful results due to scar retraction and contraction caused by circular incision around the umbilicus and on the abdominal wall for its reimplantation. Meantime, I developed a personal technique to create a natural umbilicus during full abdominoplasty (Avelar, 1976). According to my approach, some surgical principles present a significant difference in comparison to the other procedures. Before my publication, several authors introduced other approaches pulling the umbilicus in order to suture on the abdominal wall doing other types of incisions such as vertical, horizontal, circular, and semicircular ones. The final scar is a circular one with very high incidence of scar retraction and contraction, as mentioned by Grazer and Goldwing in 1977, in a memorial survey among 10,740 abdominoplasties performed by outstanding plastic surgeons all over the world. Therefore, in 1976, I introduced my first contribution on abdominoplasty though which became possible to achieve smooth umbilical area with inconspicuous surgical scars. I had the opportunity to present my new procedure in several Congresses all over the world as well as to publish in some plastic surgery journals.
When Prof. Illouz introduced liposuction in 1980, I went to visit him in order to learn the revolutionary technique. Few years later, I introduced the combination of liposuction with conventional abdominoplasty improving surgical results, but brought very right rate of complications, that I became so disappointed that I took a radical decision of do not perform any more such combined procedure during 10 years. However, I did not stop to study and I dedicated much time searching for a new procedure. Finally in 1998, I concluded my research and started performing a new abdominoplasty technique which was published and presented everywhere several times. The new concepts are to perform abdominoplasty without panniculus undermining, with preservation of perforator vessels on the abdominal wall which work as multiple pedicles to supply adequate vascularization to the remaining abdominal wall.

In the use of my new concepts, minimal complications may occur during and after abdominoplasty since the perforator vessels are not damaged peroperatively, which became a much more frequent procedure among plastic surgeons during the last two decades.

The new concepts for abdominoplasty were published and presented several times during 1999 and 2000 which were so easy to learn that some other one learned my surgical principles and published as he supposes to be the author of the technique. His publication is his first one concerning on abdominoplasty procedures. Nevertheless, during many years of my practice, I had the opportunity to publish and to present several new approaches concerning abdominoplasty as well as in other areas of plastic surgery. Therefore, the publication of this book is an opportunity to present once again to plastic surgeons the surgical principles of my new concepts on abdominoplasty, even further applications in our specialty. I wonder that the rights of my new concepts can be recognized by my colleagues who currently employ the technique.

So far, the history of abdominoplasty described in this book is a complete description since Kelly in 1899 that performed the first tummy operation, until 1999 and 2000 when I presented and published new concepts on abdominoplasty which are very useful in several other fields in plastic surgery.

São Paulo, SP, Brazil

Juarez M. Avelar
Acknowledgments

Ever since I described new concepts on abdominoplasty, it was my dream to publish this book which gives me a peculiar sensation of personal well-being with material and spiritual gain. Therefore, it is much more than simply presenting another option or new knowledge; it was created through myriad contributions and I dedicate this book to them:

• To my parents, Anisio and Maria Ana. Although they are not with me in this world, I continuously feel their presence and I am thankful for their continuous enthusiasm and incentive.
• To my loving son Thiago, and my wife Gloria, who have been constant sources of inspiration for this publication and permanent witnesses to my scientific activities.
• To Professor Pitanguy, for all the knowledge I have acquired from him and for his constant encouragement for my scientific activities. He helped me throughout my professional practice by developing in me great motivation and stimulus for the field of science.
• To Dr. Edgar Bolanho for very high level of technical illustrations of this book concerning the chapters I wrote as well as of other authors.
• To my colleagues, Professor Hélio de Rezende Paoliello Jr., Marcelo Paulo Vaccari-Mazzetti, for their friendship and enthusiasm during the preparation of this book.
• To Mrs. Sandra Eberhardt for the great support to review the chapters I wrote in this book.
• To the Plastic Surgery Unit at the Surgery Department of the Medicine School in Marilia (Science and Technology Department of São Paulo State), and the Hospital das Clínicas of Marília in São Paulo. Professor Helio de Rezende Paoliello Jr. is the Head of the Plastic Surgery Unit, who presented me with excellent conditions and support to organize and to publish this book.

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