Introduction to “Current Concepts in Abdominal Wall Reconstruction”

Jeffrey E. Janis, MD, FACS
Maurice Y. Nahabedian, MD
B. Todd Heniford, MD, FACS
Columbus, Ohio; McLean, Va.; and Charlotte, N.C.

Complex abdominal wall reconstruction (AWR) is a multidisciplinary topic. Although hernia repair has largely been the domain of general surgeons, it has become apparent over the past decade or so that optimal outcomes in complex patients are best achieved through a combined approach, whereby principles of both general and plastic surgery are utilized to address common and uncommon challenges. The major impetus behind this abdominal wall reconstruction supplement was to bring internationally renowned experts in both general and plastic surgery together to provide the best evidence, science, and data in an all-in-one collection of high-quality articles. This effort should provide the readership with the current state of affairs in the care and treatment of patients requiring complex AWR.

To this end, the guest editor team represents both plastic and general surgeons with high-volume practices in AWR. Authors from around the country were tapped to write clear, concise articles that have withstood the process of robust peer review. Even though these were solicited articles, they faced a high level of scrutiny by other experts in the field before acceptance, revision, and publication. This supplement represents the best available published evidence to date, written by authors who perform these operations every day, and brought to you in the highest impact factor journal in plastic surgery. It is important to note that this supplement would not be possible without the support of our industry partners, all of whom provided financial sponsorship without knowing or influencing its contents or the authors selected. We would also like to acknowledge the staff at Wolters-Kluwer who provided constant support and assistance in making this endeavor possible. The combined efforts of all parties, for which we are sincerely grateful, have helped to make this supplement one of the most comprehensive and complete to date.

As you can see from the Table of Contents, a myriad of topics are covered. Following the chronologic continuum of taking care of these patients, we begin preoperatively with a review of prehabilitation of the AWR patient and risk stratification tools. We move to intraoperative strategies that include both systematic reviews and current reviews of evidence around proper technique for fascial closure, appropriate mesh selection, delineating outcomes data on synthetic, long-acting resorbable, hybrid, and biologic meshes, picking the appropriate plane of mesh placement, reviews of techniques, and outcomes behind anterior and posterior component separations, timing and staging of complex AWR, and strategies to deal with subpopulations of patients we see and treat on a regular basis, such as the obese patient, the cancer patient, and the infected patient. This supplement also addresses how to manage soft tissue in the AWR patient as well as pain management strategies that may help improve patient satisfaction.

Disclosure: Dr. Janis has served as a consultant for LifeCell, Bard, Daiichi Sankyo, Pacira, and Allergan within the last 12 months before submission of this article but has no active conflicts of interest and receives royalties from Thieme Publishing. Dr. Nahabedian is a consultant for Allergan/LifeCell and Chief Surgical Officer for PolarityTE. Dr. Heniford has received honoraria, speaker’s fees, and research support from Allergan, W. L. Gore, and Stryker.
decrease length of stay, and improve complication rates. Moving to the postoperative period, there are articles on enhanced recovery protocols in AWR and evidence behind the use of incisional negative pressure wound therapy. We have also included articles on the importance of registries to collect data and either identify, corroborate, or refute existing strategies in the care of these complex patients and outcomes scales we may use to track results. The consideration of building an AWR center of excellence is also covered in detail. And finally, the supplement describes novel approaches such as “chemical components separation” using botulinum toxin that may assist in closure of complex patients.

All in all, we hope this supplement will provide the reader a current review of evidence on the topic, written by recognized experts, and combined into a single volume for ease of review and reference. It essentially is the most up-to-date “textbook” of complex AWR, and hopefully the readers will find this useful as they provide evidence-based medicine approaches to take care of these patients.

Jeffrey E. Janis, MD, FACS
Department of Plastic Surgery
The Ohio State University Wexner Medical Center
915 Olentangy River Rd.
Columbus, OH 43212
jeffrey.janis@osumc.edu