

Advances in Minimally Invasive Bariatric Surgery

Honorary Section Editor - Yashwant Koak

In this section, several international authors describe their experience with reduced-port, single-port or single incision bariatric surgery and detail the benefits, challenges and techniques for performing the operations. In the last chapter in the section authors describe adoption of Da Vinci robot for bariatric surgical operations.

Professor Alan Saber from New York gives an overview of evolution of reduced-port approach. He gives details of advantages and techniques of using this approach for a number of bariatric procedures. To make this approach successful Prof Saber gives specific contraindications, details of achieving adequate triangulation, liver retraction techniques, methods to overcome limitations of movement, umbilical port closure technique and use of TAP block analgesic control. He concludes the chapter by detailing some early complications and need for randomized studies.

Dr Saurav Chakravartty and Senior author Prof Ameet Patel, from London, give details of benefits, challenges and technique for performing “scarless” (scar hidden in umbilicus) gastric band operation. They note that there is a slower adaptation of single-port technique in bariatric surgery – mostly related to port problems and surgical challenges encountered. The authors describe the different ports that are available and details of the technical aspects to address surgical challenges, including emphasis on having an experienced assistant. They conclude by mentioning that though enough data is not available of benefits of this technique over conventional laparoscopic surgery, nevertheless it is well liked by the patient.

Prof Giovanni Dapri, from Brussels, addresses the technical challenges and cost of performing sleeve gastrectomy by single incision. Prof Dapri details the various techniques used for liver retraction, the equipment, setup and technique of surgery – using reusable and curved instruments and postop patient management. He concludes the chapter by mentioning benefits of less operating time and less pain after SILS technique.

Dr Chih-Kun Huang and co-authors from Taiwan, in their chapter on single incision laparoscopic Roux-en-Y gastric bypass, concentrate on describing their technique of performing the gastric bypass operation. The authors give technical tips on using omega-shaped umbilical incision, multi-port use at umbilicus, T-shaped liver retraction and intra-corporeal suturing. They conclude the chapter by mentioning that there is almost no difference in the outcomes comparing traditional laparoscopic and single-incision gastric bypass surgery, except for higher patient abdominal scar satisfaction.

In the last chapter in this section, Dr Ranjan Sudan and coauthors from Durham, North Carolina, write about adoption of the Da Vinci robot in performing bariatric surgery. The advantages of robotic surgery, including increased dexterity, decreased operating time and usefulness in complex bariatric operations are discussed. They conclude by mentioning that clear advantages of robotic surgery, in terms of outcomes, have yet to be proven.