

Laparoscopic Radical Prostatectomy: Intra-operative treatment and management of abdominal and pelvic adhesions

DISCUSSION

Each year, more surgeons are encountering abdominopelvic adhesions, either when treating patients with adhesiolysis or while performing other surgical interventions. Adhesions result in an economic impact in excess of one billion dollars annually.* Since previous surgery is the primary contributor to adhesions, it is incumbent on surgeons to try to prevent adhesions from developing and to safely manage them during adhesiolysis.

CASE STUDY

A sixty year old white male was admitted for extraperitoneal laparoscopic radical prostatectomy. His PSA preoperatively was 11.4, and he had a Gleason 7 prostate cancer. He had previously undergone bilateral mesh repair of inguinal hernias and three transrectal prostatic biopsies.

The patient was prepped and draped and an extraperitoneal laparoscopic approach was planned. Preperitoneal adhesions were encountered during trocar placement. Precise and cautious, sharp and blunt dissection was undertaken in the preperitoneal space, with a strategy to initially minimize lateral dissection and to create a midline “tunnel” just large enough to allow laparoscopic access to the space of Retzius. After establishing midline landmarks, lateral dissection in the inguinal areas was performed.

[continued next page]

SURGEON

Gerald Andriole, MD
Professor, Surgery
Chief, Division of Urologic Surgery
Director, Prostate Study Center at
Barnes-Jewish Hospital
Washington University
St. Louis, MO



“3-D vision delivers important information which helps the surgeon better execute the laparoscopic skill sets of dissection, grasping, and suturing.”

Extraperitoneal laparoscopic radical prostatectomy with Viking 3Di Vision System

Adhesions among the mesh, the external iliac arteries and veins, Cooper's ligament and the obturator nerves were sharply taken down. This exposure allowed safe and complete bilateral pelvic lymphadenectomy.

In addition to these pelvic adhesions, more adhesions were encountered in the plane between Denonvilliers fascia and the rectum. Precise cold and sharp dissection of this plane was performed along with bilateral nerve-sparing. This allowed successful removal of a 100 gram prostate, bilateral nerve sparing and precise urethral-vesical anastomosis. The patient's post-operative course went without complications.

Experience the benefits of the Viking 3Di Vision System:

Compatible with Robotic Systems

Provides 3-D vision to 3 additional surgical team members

Delivers 3-D vision for non-robotic procedures

Light-weight, ergonomic design

Picture-in-Picture capabilities

Cost-effective, modular system

Short learning curve. No formal training required.

CONCLUSIONS

Three-dimensional visualization and meticulous sharp and cold dissection are important aides for successful adhesiolysis, as is use of energy devices with closed-loop circuitry that minimize the likelihood of incidental, iatrogenic electrical dispersion. This is especially important during intraperitoneal dissections.

The Viking 3Di Vision System was utilized during this laparoscopic surgery to allow for precise appreciation of the relationship among the iliac vessels and obturator nerves during the lymphadenectomy and of the rectal surface and neurovascular bundles during the prostatectomy. Enhanced spatial information affords the surgeon more confidence when determining dissection planes of adhered surfaces and offers the potential to avoid injuries such as bowel perforation, vascular or neurologic injury, or iatrogenic positive margins.

VIKING
SYSTEMS

Viking Systems, Inc.

4350 La Jolla Village Drive Suite 900

San Diego, CA 92122

tel 858.431.4010

Discover3DSurgery.com

see what you've been **M.I.S.**ing

