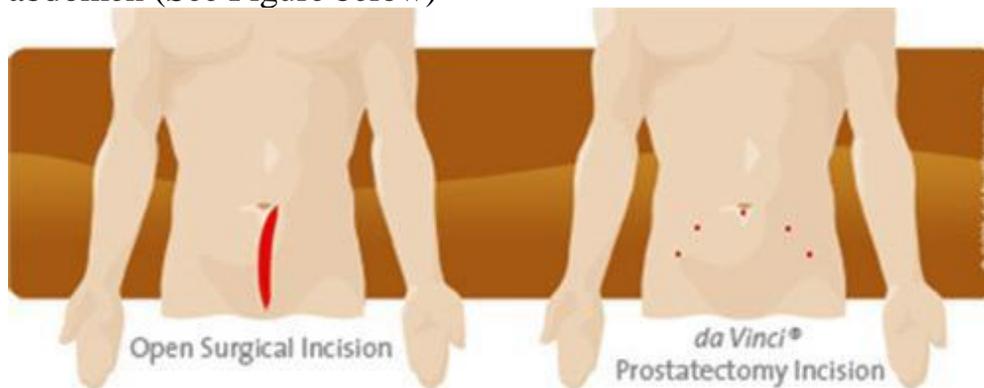


## Robot assisted Laparoscopic Radical Prostatectomy

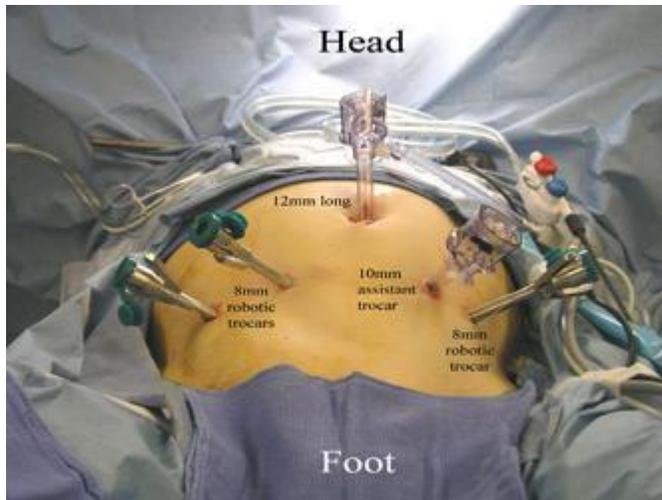
Compiled by Charles (Chuck) Maack – Prostate Cancer Advocate/Mentor

Robotic Prostatectomy, also known as Robotic surgery for prostate cancer or da Vinci® Prostatectomy is a minimally invasive surgery that is now the preferred approach for many for removal of the prostate in those diagnosed with organ-confined prostate cancer. The daVinci Prostatectomy may be the most effective, least invasive prostate surgery performed today. Though any diagnosis of cancer can be traumatic, the good news is that if your doctor recommends prostate surgery, the cancer was probably caught early. And, with daVinci Prostatectomy, the likelihood of a complete recovery from prostate cancer without long-term side effects is, for most patients, better than it has ever been.

The operation is performed using the daVinci Surgical system and 3-D endoscopic and wristed instruments inserted through 5-6 small incisions across the mid-abdomen (See Figure below)



During the dVP, a telescopic lens is inserted into one of the small incisions. This provides a magnified 3 dimensional view of the delicate nerves and muscle surrounding the prostate, thus allowing optimal preservation of these vital structures. The cancerous prostate gland is dissected free from the bladder and urethra, and the bladder and urethra are sewn together without the surgeon's hands ever entering into the patient's body. The prostate is removed intact through one of the small incisions located at the belly button by extending the incision to accommodate the size of the prostate. These small incisions are closed with absorbable suture.



## What are the benefits of Robotic prostatectomy?

The daVinci Surgical System enables surgeons to operate with unmatched precision and control using only a few small incisions. Recent studies suggest that da Vinci Prostatectomy may offer improved cancer control and a faster return to potency and continence.

The daVinci Prostatectomy also offers these potential benefits:

Significantly less pain and scarring

Less blood loss

Fewer complications

Less scarring

A shorter hospital stay and faster recuperation

Faster return to normal daily activities

Preventing Portal Hernias following RLRP/daVinci procedure AND appropriate re-attachment of urethra to bladder neck

The following are concerns every patient should discuss with their RLRP surgeon prior to surgery:

### **Appropriate suturing of incision portals:**

Many men have reported developing hernias in the areas of the portal incisions required for RLRP. What is occurring is that when suturing the portals after RLRP, they are not adequately closing the deep muscle layers; particularly in

the abdominal wall where one can develop an incisional hernia. This is likely at the site of the larger incision just below or above the navel (umbilicus). (The smaller trocar incisions are less likely to have incisional hernias.) It is important that you bring this to your RLRP surgeon's attention by telling him of these many subsequent hernia reports from past RLRP patients. This is just as likely a concern with LRP or RP.

An explanation of what is most often performed to close the incisions when the RLRP procedure is completed:

0 PDS (polydioxanone sutures) are first applied to close inner muscular tissue in a figure eight manner followed by a bonding material (glue?) known as Dermabond. Remainder of the skin incisions closed with 4-0 Monocryl (absorbable sutures) applied in a subcuticular fashion. All of the skin incisions are then dressed with a protective barrier, Dermabond or similar, that forms its own protective barrier over the incision. The FDA has approved the use of this adhesive to seal out infection-causing bacteria, including certain *Staph*, *Pseudomonas* and *E. coli*.

Apparently it is considered the above procedure provides satisfactory suturing. I can only surmise that if hernias erupt at the location of prior portal suturing, the physician or his/her aides closing up the portals failed to efficiently follow this procedure.

**Appropriate Anastomosis of urethra and bladder neck during RLRP:**

Anastomosis - The connection of normally separate parts or spaces so they intercommunicate; in this case, the re-connection of the urethra to the bladder neck following surgical prostate gland removal - as described by Ashutosh Tewari, MD, Director - Cornell Institute of Robotic Prostatectomy, New York, NY, considered one of the Best Among The Rest in the nation in Robot assisted Laparoscopic Radical Prostatectomy (RLRP) in this Prostate Cancer Research Institute (PCRI) paper <http://tinyurl.com/mg63o6b> where you can scroll down to “d) Anatomic Reconstruction Technique for Continence Preservation” for a complete explanation of the procedure.

### **Anatomic Reconstruction Technique for Continence Preservation**

The key elements of our continence preservation technique involves (a) preservation of pubo-prostatic ligaments and **arcus tendinous**, (b) creation of a muscular flap behind the bladder neck (to be later sutured to the distal end of Denonvilliers' fascia behind the sphincter), (c) control of the dorsal venous complex using a pubo-prostatic ligament sparing stitch, (d) preparation of a thick and long urethral stump during apical dissection, (e) reinforcement of the flap behind the bladder neck (Pagano principle), (f) suturing the flap to the distal end of Denonvilliers' fascia close to the urethral stump to prevent **caudal** retraction of the central tendon and thus provide posterior support (Rocco principle) and g) reattach the arcus tendinous and pubo-prostatic plate to the bladder neck once anastomosis is completed. (See **Figure 5**)



Figure 5 – Total reconstruction technique for continence preservation. We perform posterior reconstruction with double layers of tissue behind the urethral sphincter and anterior reconstruction to achieve early continence.

Watch the daVinci Robot assisted Laparoscopic Radical Prostatectomy (RLRP) procedure "live:" <http://tinyurl.com/m7fszjp>

I also recommend that you discuss the following consideration with your surgeon prior to surgery:

A reasonable procedure the day prior to any form of radical prostatectomy would be to prescribe Erythropoietin to patients as an aid to return of erectile function post-op.

Erythropoietin Promotes Erection Recovery After Nerve-Sparing Radical Retropubic Prostatectomy: A Retrospective Analysis. See:

[http://www.ncbi.nlm.nih.gov/pubmed/18778310?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed\\_ResultsPanel.Pubmed\\_DefaultReportPanel.Pubmed\\_RVDocSum](http://www.ncbi.nlm.nih.gov/pubmed/18778310?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum)

OR TRY <http://tinyurl.com/6etfbo>