Robotic-Assisted Surgery Potentially Helps Bladder Cancer Patients

About 30 percent of the more than 70,000 bladder cancer cases expected in 2012 are muscle invasive. In such cases, radical cystectomy is the preferred treatment. In a pilot trial, a team of investigators assessed the efficacy of open radical cystectomy (ORC) vs. robotic-assisted laparoscopic radical cystectomy (RARC). While there were no significant differences in treatment outcomes, RARC resulted in decreased estimated blood loss and shorter hospital stay compared to ORC. The results are published in the February 2013 issue of The Journal of Urology.

"In the last decade minimally invasive approaches including robotic-assisted approaches have emerged as viable surgical options for many urological malignancies with the promise of decreased morbidity with shorter hospital stays, faster recovery, and less narcotic analgesic requirements," says lead investigator Dipen J. Parekh, MD, Professor and Chairman of the University of Miami Miller School of Medicine's Department of Urology and Director of robotic surgery; formerly at the University of Texas Health Science Center at San Antonio.

The goal of the clinical trial was to provide preliminary data from a single institution's randomized trial that evaluated the benefits of robotic-assisted vs. open surgery in patients with invasive bladder cancer. The trial, conducted between July 2009 and June 2011, involved 47 patients and was performed at the University of Texas Health Science Center at San Antonio. Primary eligibility was based on candidacy for an open or robotic approach at the discretion of the treating surgeon. Forty patients were randomized individually and equally to either an ORC or RARC group using a computer randomization program. Each of the two study groups was similar in distribution of age, gender, race, body mass index, previous surgeries, operative time, postoperative complications, and final pathological stage.

Investigators evaluated five surgery outcome factors: Estimated blood loss, operative time from incision to closure, transfusion requirements, time to return of bowel function, and length of stay.

The robotic group experienced significantly decreased blood loss, accompanied by a trend toward faster return of bowel function, fewer hospitalizations beyond five days, and fewer transfusions.

"The strength of our study is the prospective randomized nature that eliminates selection biases that may have been present in prior retrospective analyses," says Dr. Parekh. "We also believe that our study demonstrates that a prospective randomized trial comparing traditional open and robotic approaches in bladder cancer is possible."

This investigative team has joined with several institutions nationally to build on its

study and has started an advanced randomized clinical trial among multiple institutions to further compare and assess open vs. robotic-assisted radical cystectomy among patients with invasive bladder cancer. It plans to collect intermediate and long-term survival data from these same patients as well as data on quality of life, daily living activities, handgrip strength, and mobility.

Source URL (retrieved on *12/22/2014 - 10:59pm*):
http://www.surgicalproductsmag.com/news/2012/12/robotic-assisted-surgery-potentially-helps-bladder-cancer-patients?qt-recent_videos=0