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Prostate cancer patients treated with robotic-assisted surgery can expect low recurrence of cancer

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A first-ever, long-term study of patients who underwent robot-assisted surgery to remove their cancerous prostates found that nearly 87 percent of them had no recurrence of the disease after five years.

The findings were reported in this month's issue of the *European Urology* journal by a team of Henry Ford Hospital researchers led by Mani Menon, M.D., an internationally recognized pioneer in the use of high-precision surgical robots.

In an editorial accompanying the article, the author wrote "it is very clear that the article by Menon et al represents a land mark contribution in the area of PCa (prostate cancer) management."

Dr. Menon, director of Henry Ford's Vattikuti Urology Institute, perfected the technique for minimally invasive laparoscopic treatment of prostate cancer.

Because they were among the first surgeons in the world to use the technique, Dr. Menon and his team had a unique opportunity to test its effectiveness on the long-term survival of a large group of prostate cancer patients.

Radical prostatectomy is a treatment in which the entire diseased prostate gland and some surrounding tissue are surgically removed in

hopes of preventing the cancer from spreading to other parts of the body. It has long been considered an effective treatment for localized prostate cancer.

Early studies found that about 35 percent of men suffered a recurrence within 10 years after undergoing traditional radical prostatectomy. But Henry Ford researchers suspected those results might have become outdated as the use of prostate-specific antigen (PSA) screening gained wider acceptance, allowing prostate cancer to be detected in more men at a younger age.

No studies have looked at biochemical recurrence of prostate cancer in patients diagnosed after 2000, when Dr. Menon and his team at Henry Ford began using robot-assisted surgery. Robot-assisted radical prostatectomy has since become the most widely used form of surgical treatment of localized prostate cancer in the country.

But after carefully reviewing the literature since then, Dr. Menon's team found almost no research on medium- to long-term follow-up results.

All 1,384 of the men chosen for study were diagnosed with moderately aggressive prostate cancer and underwent robot-assisted radical prostatectomy between September 2001 and May 2005. Their average age was 60.

The patients were checked for recurrence of their cancer every three months during the first year after surgery, twice during the second year, then annually. A median of five years of follow-up was used for the study.

Dr. Menon or his colleague, James Peabody, M.D., performed all of the robot-assisted surgeries in the study. While both are highly experienced surgeons, they cautioned that the study period included their own

learning curve in developing the robot-assisted technique, so results may be difficult to generalize.

Still, they say, the fact that deaths from prostate cancer occurred in only 1 of 1,000 patients per year of follow-up should provide a strong endorsement of the curative role of radical prostatectomy for patients with localized prostate cancer treated in the contemporary era.

And "with five-year actuarial biochemical recurrence-free survival outcomes of 86.6 percent, robot-assisted radical prostatectomy appears to confer effective five-year prostate cancer control."

Henry Ford's robot-assisted urology program uses the da Vinci computer-enhanced, minimally invasive surgery system introduced in 1999 by Intuitive Surgical, Inc. It enables surgeons to manipulate robotic arms for precise procedures through a series of small incisions instead of the large wounds required by traditional open surgery, and provides 3-D monitoring for the entire surgical team. The potential benefits include shorter recovery times, less trauma, and reduced hospitalization costs.

It is also the basis of a nerve-sparing procedure called the Veil of Aphrodite, developed by Dr. Menon to minimize the erectile dysfunction common in men after undergoing traditional radical prostatectomy.

Provided by Henry Ford Health System