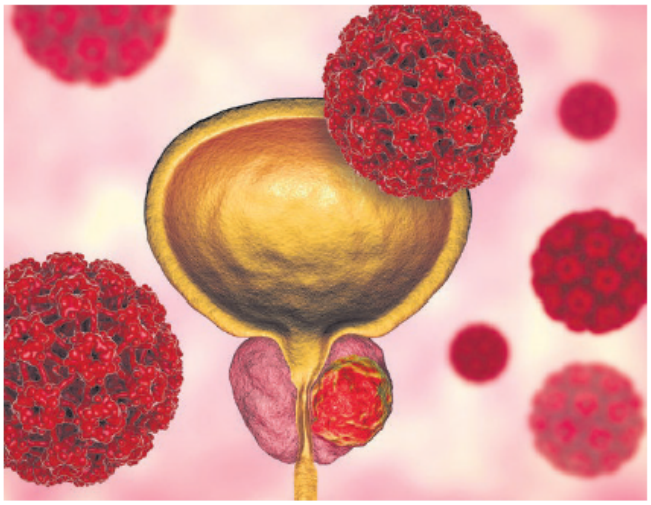
ask the experts

Checking up on prostate cancer

A prostate biopsy can be done in several ways. Senior consultant urologist Dr Png Keng Siang explains how patients with prostate cancer can benefit from minimally-invasive robot-assisted biopsy and surgery



A robot-assisted biopsy of the prostate can accurately detect malignant cancer cells and reduces the need for the patient to undergo repeated biopsies. PHOTO: GETTY IMAGES

Q I am a 58-year-old male with suspected prostate cancer. My urologist recommended that I undergo a robot-assisted prostate biopsy for further confirmation. What is it and how does it work?

A prostate biopsy is a procedure which involves removing small tissue samples of the prostate for analysis. There are several ways of doing a prostate biopsy and a robot-assisted prostate biopsy is one of them.

For cancers in the early stage, the suspected cancerous area in the prostate gland can be very small, around 1mm to 2mm. A robot-assisted prostate biopsy will be able to detect cancers at this stage. It incorporates an MRI scan of the prostate gland into the targeting process of the biopsy.

During the process, the urologist will be able to use the robot-assisted biopsy computer software to guide the robotic arm to the exact area of the prostate gland where the suspected cancer is located based on the MRI scan. This helps the urologist obtain a prostate tissue specimen from the patient at that exact spot through the robotic arm.

The procedure is done under light sedation so that the patient is kept very still during the process. He can be discharged from hospital on the same day once he wakes up from the sedation.

Q What are the benefits of a robot-assisted biopsy compared to a traditional biopsy?

A traditional prostate biopsy is done with only ultrasound guidance. Ultrasound will not be able to identify small cancers, hence early-stage cancers are often missed with a traditional biopsy.

Since a robot-assisted biopsy involves an MRI scan, it increases the accuracy of detecting prostate cancer up to 80 per cent. This reduces the need for the patient having to undergo repeated biopsies.

Your urologist can also offer a biopsy of the entire prostate gland, covering every spot of the gland, to ensure that no cancer is missed out.

Q How does robotic surgery help in treating prostate cancer?

Robotic surgery is now the surgery of choice for prostate cancer. The surgery is called robot-assisted radical prostatectomy, an advanced and minimally-invasive form of surgery.

It allows improved vision for the doctor through the use of advanced instrumentation and technology. With this, he can finely dissect and remove the prostate gland, as well as reconstruct the urinary passage.

The patient will also benefit from quicker recovery, and there is less chance of complications compared to an open surgery. Patients can be discharged from hospital three to four days after surgery.

Q Which prostate cancer patients are eligible for robot-assisted prostate cancer surgery?

Patients whose prostate cancer is confined to the prostate gland are the best candidates for robotic surgery. This means that the cancer has been detected in its early stage.

At this stage, the cancer has not spread beyond the prostate gland to invade the surrounding organs such as the rectum, bladder or surrounding lymph nodes.

Dr Png Keng Siang
Senior consultant urologist
FeM Surgery @ Alvernia
#07-54 Mount Alvernia Hospital
Medical Centre D