

MEN'S HEALTH MATTERS

ISSUE 2 • 2021
UROLOGICAL SURGEON
DR MARTIN ELMES

Offering your patients quality
Urological care

Minimally Invasive Prostate BPH Treatments
Robotic Prostate and Kidney Surgery
Penile Prosthesis Prostatectomy Rehabilitation Surgery

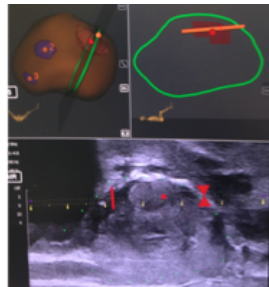
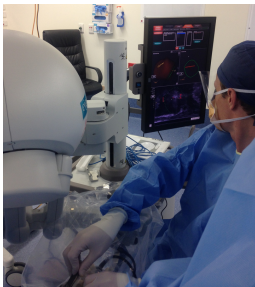


THIS ISSUE NEWS AND UPDATES

- **Artemis computer targeted Fusion Biopsy - advanced accuracy of detecting prostate cancer**
- **Biopsy Techniques - Pros & Cons**
- **The Da Vinci Robot - Advanced Surgical PCa treatment**

ARTEMIS FUSION BIOPSY

Artemis allows biopsy site tracking with 3D ultrasound image and full colour model and fusion of real-time intra-operative ultrasound with pre-operative MRI. Artemis semi-automatically computes gland volume and boundaries. This enhances tissue structure visualisation for improved planning and guidance.



The Artemis fusion biopsy

Pre-operative MRI - lesion is **visible**

Intra-operative Ultrasound - lesion **invisible**

Artemis fuses MRI / US targeting the specific lesions

WHY NOT MRI GUIDED?

- Usually use transrectal route or transgluteal -> sepsis
- Local anaesthesia only -> pain

Artemis provides several imaging enhancements and benefits to standard 2D ultrasound:

- Greatly increases the ability to examine the prostate for abnormalities or suspicious areas which may need sampling
- Advanced needle navigation and tracking
- Sophisticated recording of actual biopsy sites sampled; sites can be revisited at any time
- View and overlay previous prostate gland volumes and biopsy locations

BIOPSY TECHNIQUE PROS & CONS

ROUTE

1. TRANSRECTAL BIOPSY (TRUS)

CON

- Major issue is urosepsis -> up to 5%
- Risk increases with no. of biopsies and with multi resistant bowel organisms

PRO: can be done under local anaesthetic

2. TRANSPERINEAL BIOPSY

CON

- Takes longer
- Full aesthetic required

PRO: sepsis risk is only 1/1000 (50x less likely compared to transrectal)

3. TRANSGLUTEAL

- Limited to MRI machine target biopsy
- Pain ++

NUMBER OF BIOPSIES

1. TEMPLATE BIOPSY

- > 20 samples randomly
- much more likely to find insignificant cancer
- higher miss rate on significant cancer (Gleason >7)

2. TARGET BIOPSY

- Far fewer needle samples -> lower risk of clots/urine retention
- Higher accuracy as targeting areas of concern on MRI and/or PET PSMA
- Less likely to find low grade (Gleason 6) insignificant cancer

FUSION TECHNIQUES

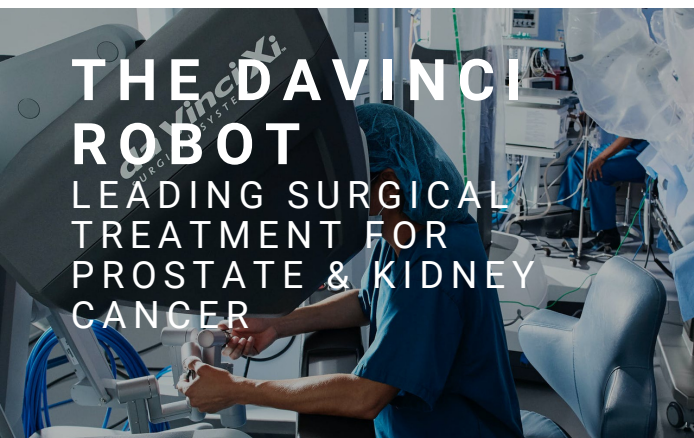
1. MRI/US - COGNITIVE FUSION

- Surgeon uses pictures on his/her laptop and manually estimates where the corresponding area is in prostate ultrasound

2. MRI/US COMPUTER FUSION

- The Artemis Fusion system performs the fusion thus reducing operator error

Dr Elmes only uses the combination of the best of all of three MRI/US fusion Computer Targeted Transperineal biopsy



Robotic Radical prostatectomy is the newest and most advanced surgical option for the treatment of patients with localised prostate cancer. Typically a patient who has undergone a radical prostatectomy using the da Vinci Xi Surgical System can expect to leave hospital in just one to two days and return to normal activities within a week or two.

The da Vinci system enables Dr Elmes to operate the robotic instruments in a full range of motions, transforming hand movements into corresponding movements of the surgical instruments within the patient. The da Vinci robot comprises the surgeon's console and surgical cart. The robot only requires incisions of less than 1cm with one slightly larger to allow removal of the prostate, compared with an incision of up to 25cm for a traditional radical prostatectomy.

LATEST ROBOTIC TECHNIQUE ADVANCEMENT

- A new minimal apical dissection/lateral prostatic fascia preservation technique - maximised preservations of periurethral tissue around urethral stump avoiding classic incision of the endopelvic fascia; outcomes:
 - 1-week continence rate of 37%
 - 6-week rate was 77.6%
 - Potency rates were 69%, 82%, and 92% at 3 months, 6 months, and 1 year, respectively
- Post operative continence recovery is reported to be influenced by the amount on fascia preservation of the lateral aspect of the prostate
- In addition, assists and enhances erectile nerve spare

BENEFITS OF THE DA VINCI ROBOT

- Significantly less pain
- Less blood loss
- A shorter hospital stay
- A faster return to normal daily activities
- Quicker return to work
- **Improved erectile nerve sparing**



WISHING YOU A VERY MERRY CHRISTMAS
& A HAPPY NEW YEAR FROM ALL OF US AT GOLD
COAST UROLOGIST

Thank you for your support this year. We look forward to working with
you again in the New Year.

Our rooms will be closed from Thursday 23rd of December and will re-open on Monday 17th of January 2022