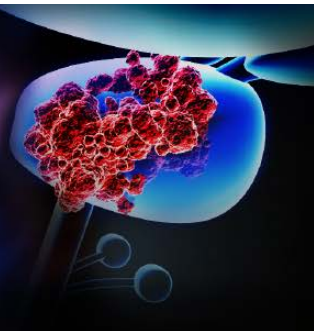
17th Asia-Pacific Prostate Cancer Conference 2016 Conference Review™



Making Education Easy

31 August – 3 September, Melbourne, Australia

In this review:

Abbreviations used in this review:

ADT = androgen-deprivation therapy;
CRPC = castration-resistant prostate cancer;
ISUP = International Society of Urological Pathology;
MRI = magnetic resonance imaging; **mpMRI** = multiparametric MRI;
PI-RADS = prostate imaging reporting and data system;
PSA = prostate-specific antigen;
PSMA-PET = prostate-specific membrane antigen positron emission tomography;
RALP = robot-assisted laparoscopic radical prostatectomy;
SBRT = stereotactic body radiotherapy; **TRUS** = trans-rectal ultrasound.

Welcome to the 17th Asia-Pacific Prostate Cancer Conference (APCC), held this year in Melbourne.

The conference brought together world opinion leaders who presented their depth of knowledge and experience to the Australian industry, discussing all facets of prostate cancer management, treatment and scientific advance in this discipline. Mr Phil Dundee, a Melbourne urologist and APCC program secretary has selected a number of key meeting presentations for commentary in this review.

We hope you enjoy these selections and look forward to your comments and feedback.

Kind Regards,

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Personalised medicine within the prostate cancer diagnosis pathway: pre-biopsy MRI for all

Authors: Van Rij S et al.

Summary: This study in 428 patients with suspected prostate cancer was conducted to evaluate the influence of pre-biopsy MRI (1.5T) assessed on the PI-RAD V1.0 scale, on the prostate cancer diagnostic pathway. An MRI was conducted prior to biopsy in 259 patients and 202 patients underwent prostate biopsies, with 133 (66%) diagnosed with prostate cancer. A biopsy was not conducted in 41 patients because they were at low risk due to a combination of large prostate volume, low PSA density and a PI-RAD score of 1–2. Watchful waiting was opted by 16 patients who declined biopsy, while 20 (10%) patients had a limited TRUS biopsy (2–6 cores) because of an obvious tumour on MRI, all of whom had a pathologically-confirmed prostate cancer. In 75 patients a primary transperineal biopsy was conducted, 59 (79%) patients had prostate cancer, 40% of whom had anterior lesions that might have been missed by a standard TRUS biopsy; targeted biopsies guided by MRI images were conducted in eight patients.

Comment: MRI has generated much interest in the past few years, but the role of MRI in the pre-biopsy setting hasn't yet been clearly defined. Of note in this series, all images were acquired with a 1.5T magnet and reported according to PI-RADs V1.0. We've already moved on from this, with 2.0 and 3.0T magnets for acquisition and an updated PI-RADs reporting protocol. The conclusion here is that MRI allows a personalised approach, with high levels of detection, whilst allowing some men to avoid "unnecessary" biopsy. MRI can miss infiltrative, high-grade disease, the same disease that can present with low PSA. We don't know how many significant cancers were missed in this series in men who weren't biopsied and it's clear some men will be spared a "necessary" biopsy with this approach.

Reference: BJU International 2016;118(Supplement 1):Abstract 033

Abstract

Awarded Best Poster, Clinical Urology

Do multi-parametric MRI guided biopsies add value to the standard systematic prostate needle biopsy? Early experience in an Australian regional centre

Authors: Kam J et al.

Summary: This Australian single-centre study examined the value of mpMRI-guided biopsies during systematic prostate needle biopsy in the management of prostate cancer (n = 69; mean age 66 years, PSA 7.9 ng/mL; prostate volume 53 cc). mpMRI suggested 42 (61%) cases had a PI-RADS 4–5 lesion and 27 (39%) had a PI-RADS 3 lesion. Cognitive biopsies were conducted in 12 patients and 57 received a MRI-transperineal fusion biopsy. Prostate cancer was diagnosed in 54 patients, 13 (24%) had a higher Gleason score on mpMRI-guided biopsies versus systematic prostate needle biopsy, while 7 (13%) prostate cancer cases were detected on mpMRI-guided biopsies but not by systematic prostate needle biopsy. A radical prostatectomy was conducted based on the mpMRI-guided biopsies results alone, six patients had an upgrade in Gleason score based on mpMRI-guided biopsies with four resulting in a change in treatment, and 11 (20%) cases had a management change based on the mpMRI-guided biopsies result.

Comment: This abstract took the prize for best clinical urology poster. Along with the increased utilisation of pre-biopsy MRI, there has been increased adoption of MRI-transperineal fusion biopsy. Professor Rob Reiter presented data from UCLA during the plenary sessions of APCC 2016 indicating the combination of MRI-guided biopsy and systematic biopsy performed better than either biopsy alone. In this series, mpMRI-guided biopsies changed management in 20% of cases. In 2011–12, there were 16,663 prostate biopsies performed in Australia and although many urologists now advocate and order pre-biopsy MRI in all patients, this has significant cost implications as well as MRI resourcing repercussions. Do we have enough evidence yet to support this approach?

Reference: BJU International 2016;118(Supplement 1):Abstract 064

Abstract