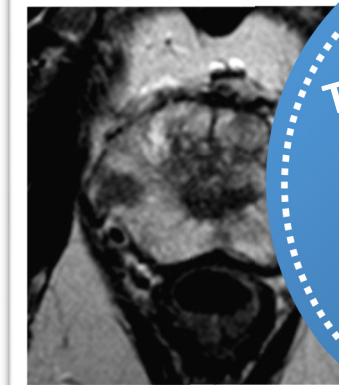


Prostate Cancer MRI Accurate Diagnosis and Treatment

Rediscovering Prostate Cancer with MRI



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PSA to Prostate MRI

for patients and curious doctors

Samuel Aronson, M.D.

Multiparametric Prostate MRI

- > Time consuming to learn, interpret and clinically implement
- > Requires high quality image acquisition, experienced **Radiologist**, MRI knowledgeable **Urologist** and **Pathologist** to prove the presence of cancer (concordance with the MR images)
- > For clinical and scientific accuracy MRI reports need to be standardized and clinically useful
- > Risk assessment **selects** men for MRI, MRI **triages** men for biopsy
- > Perform baseline MRI before biopsy artefact
- > The volume, location and definition of a MRI nodule is becoming as important as the number of biopsy cores and % of a core with cancer in predicting the aggressiveness of a cancer
- > 5 alfa reductases inhibitors makes cancers much more difficult to MR image
- > MRI provides local-regional staging below the aorta bifurcation - capsule, adjacent, nodes and bones

Prostate MRI Creates

Further understanding of prostate cancer's natural history
New avenues for cancer research
Lead-time bias

References

1. D'Amico, A.V. et al. Biochemical Outcome After Radical Prostatectomy, External Beam Radiation Therapy, or Interstitial Radiation Therapy for Clinically Localized Prostate Cancer, JAMA, September 16, (1998), vol. 280, no. 11, p.969-973.
2. Epstein, J.I. The Gleason Grading System (2013) Lippincott & Wilkins.
3. Oleksandr N., et. al., Definition of Insignificant Tumor Volume of Gleason Score 3+3=6 (Grade Group 1) Prostate Cancer at Radical Prostatectomy: Is it Time to Increase the Threshold?, J. of Urol. Vol. 196,1-6 (2016)
4. PI-RADS v2, American College of Radiology, pub. online (2015).
5. Thomsen, F.B. et al. Active Surveillance for Clinically Localized Prostate Cancer – A Systematic Review, J. of Surg. Oncology (2014) 109:830-835.
6. Wein, A. J. et al., Campbell-Walsh Urology, Elsevier, 2016

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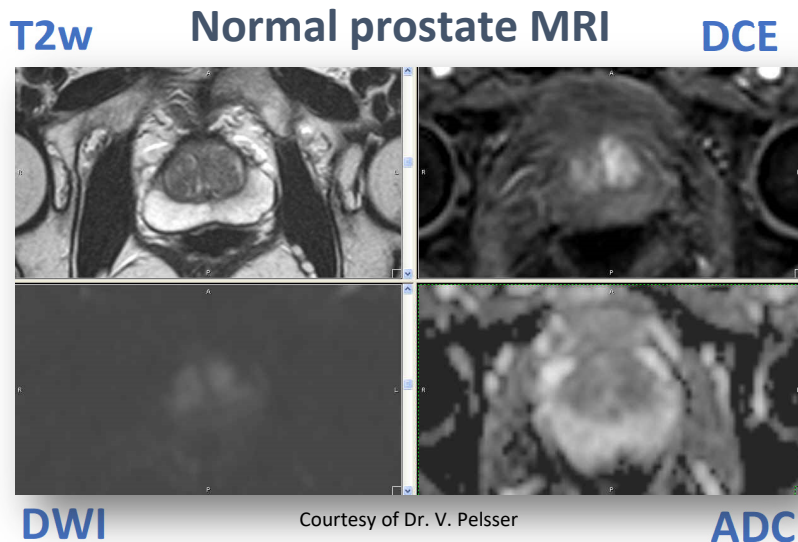
Prostate MRI

Rediscovering Prostate Cancer

Natural History, Diagnosis,
Treatment and Monitoring

This new valuable technology **detail images** prostate anatomy, physiology and microvasculature is transforming our understanding and management of prostate cancer.

*Some truths will be redefined
Some old assumptions changed
New frontiers discovered*



43 years, african american, PSA 4.0, prostate volume 38 cc, PSAD 0.10
DRE- no nodule, MRI Score 1, no suspicious nodules,
no biopsy, pre-programmed follow-up

Updating with Prostate MRI Clinical / Pathologic Staging

- Epstein's Criteria
Insignificant, Significant cancer
- D'Amico's Classification
Low Risk, Moderate Risk, High Risk
- TNM Staging of Prostate Cancer
- Predictor Tables (MSKCC, Partin, Sunnybrooke, etc.)

Image Based Prostate Cancer Management Prostate MRI Key Roles

- Screens Men at Risk
- A imaging biomarker
- Characterizes the aggressive significant cancer nodules
- Local-regional staging
- Selects/limits the number of men requiring biopsy
 - Fusion targeted biopsy
- Active Surveillance criteria and monitoring
- Decreases overdiagnosis and overtreatment
- More accurate treatment selection and planning
 - Focal Therapy, Surgery and Radiation
- Post-treatment evaluation for residual or recurrent cancer

Prostate MRI

Biomarker, Screening Tool, Reference Study
Diagnostic, Monitoring Instrument

*new technology, new discoveries
new questions to answer, new problems to solve*