

Prostate Cancer

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Prostate cancer - diagnostic pathway

- Hx and Exam
- IPSS, Flow rate, PVR
- DRE
- Repeat PSA
- Risk Assessment and Discussion
- Further Tests
 - MRI/Bone Scan/PET
 - Prostate Biopsy

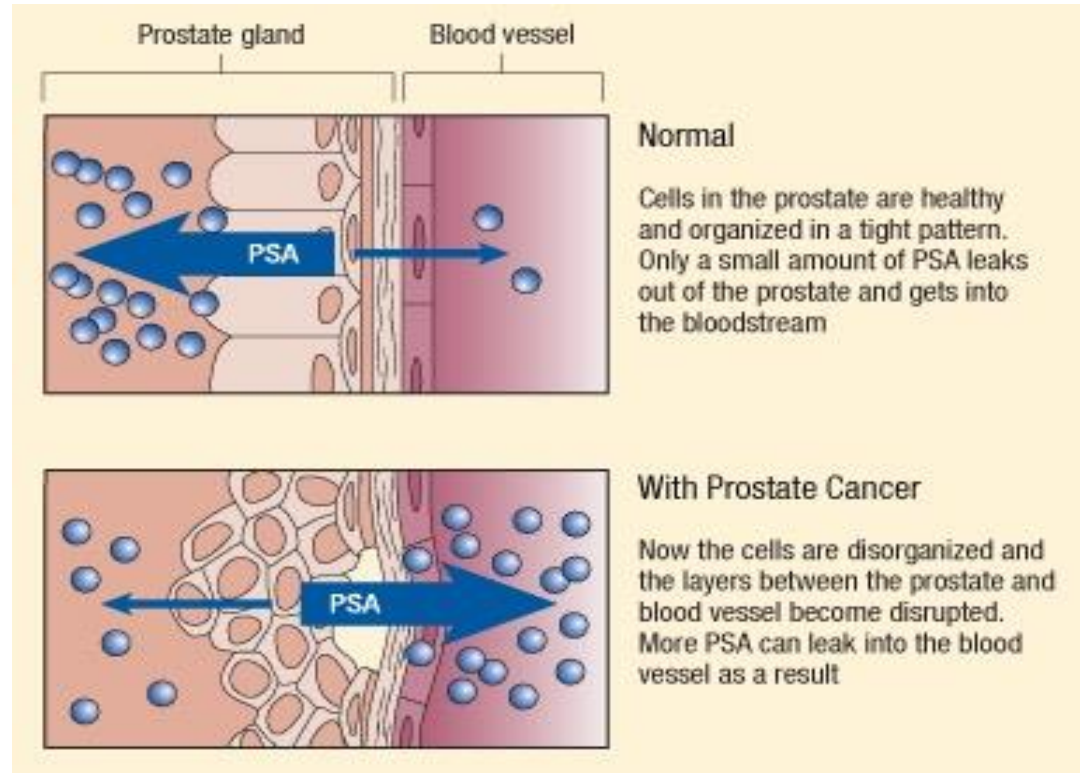


Tumour markers?



The PSA test: Elevation

- Prostate Cancer
- Prostatitis
- Instrumentation
- BPH
- Age
- UTI
- Ejaculation?



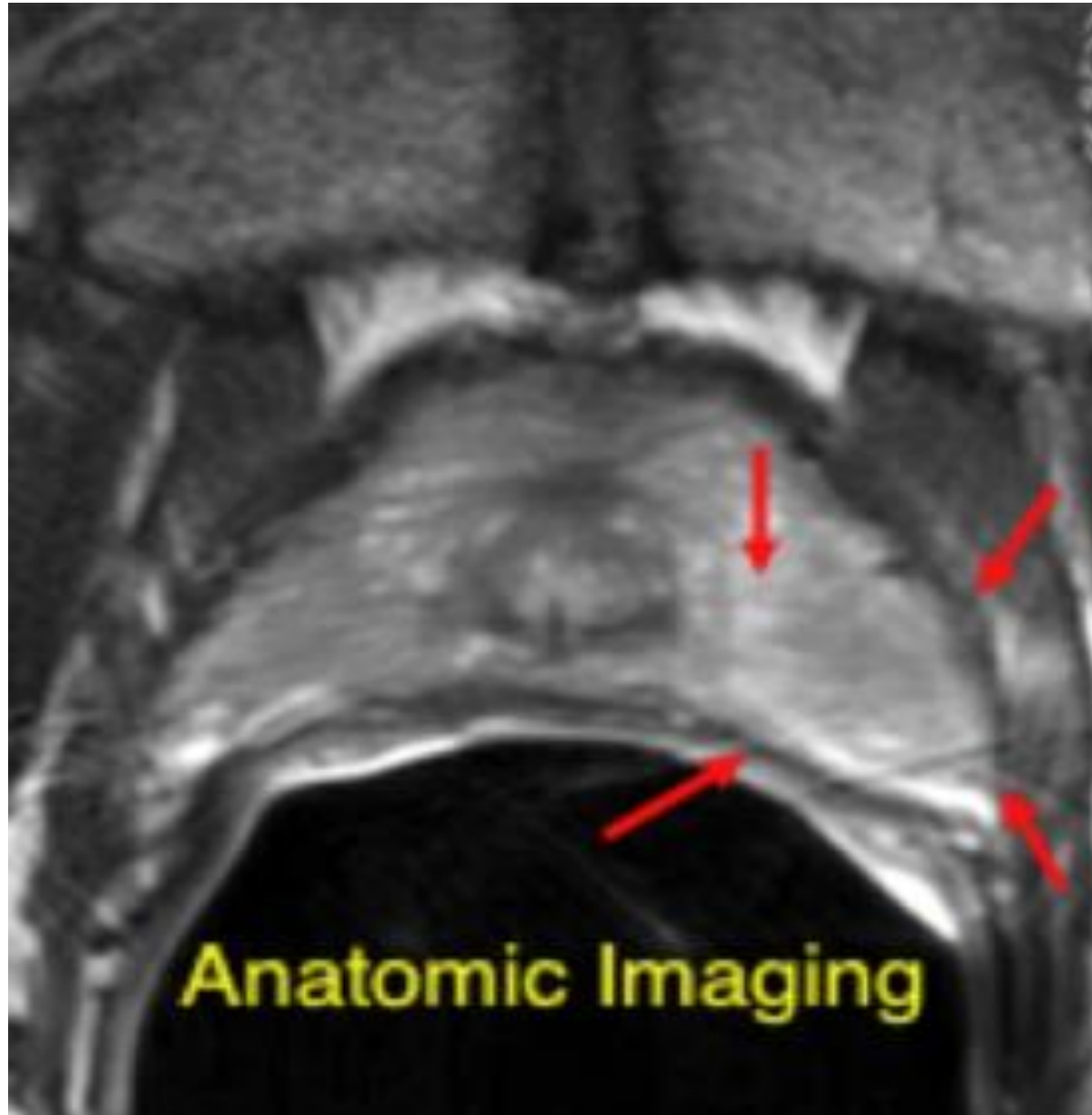
More information

- DRE
- PSA:
 - Density
 - Free to total ratio PSA
 - PCA3
- Multiparametric MRI
- Targeted prostate biopsies
 - Fusion
 - Cognitive directed

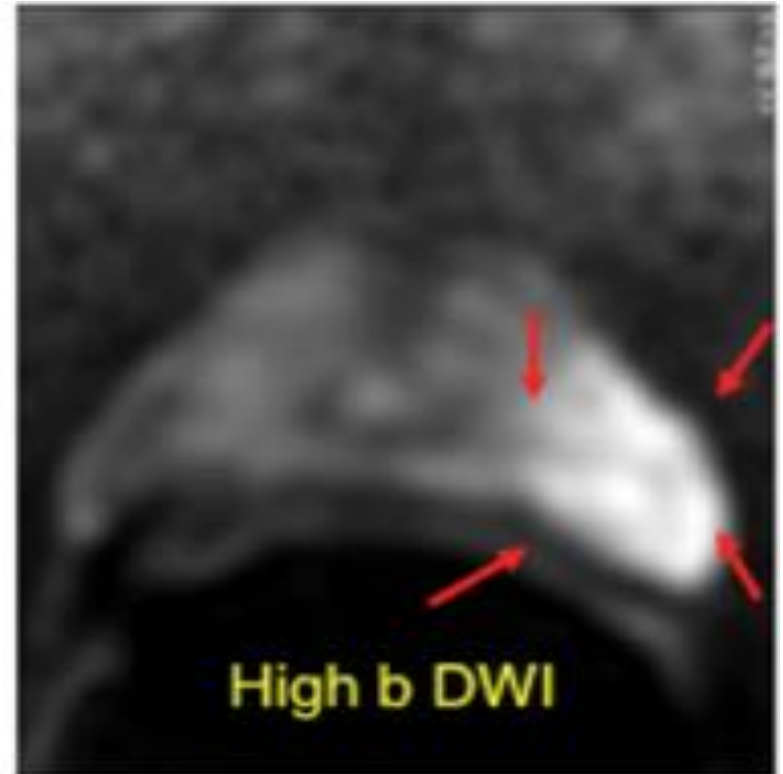
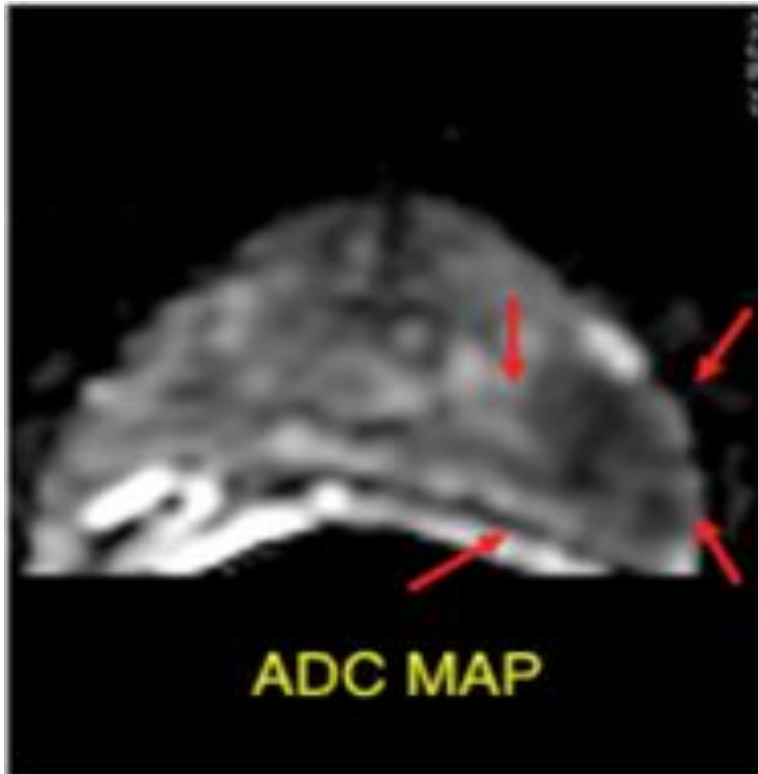


The role of imaging

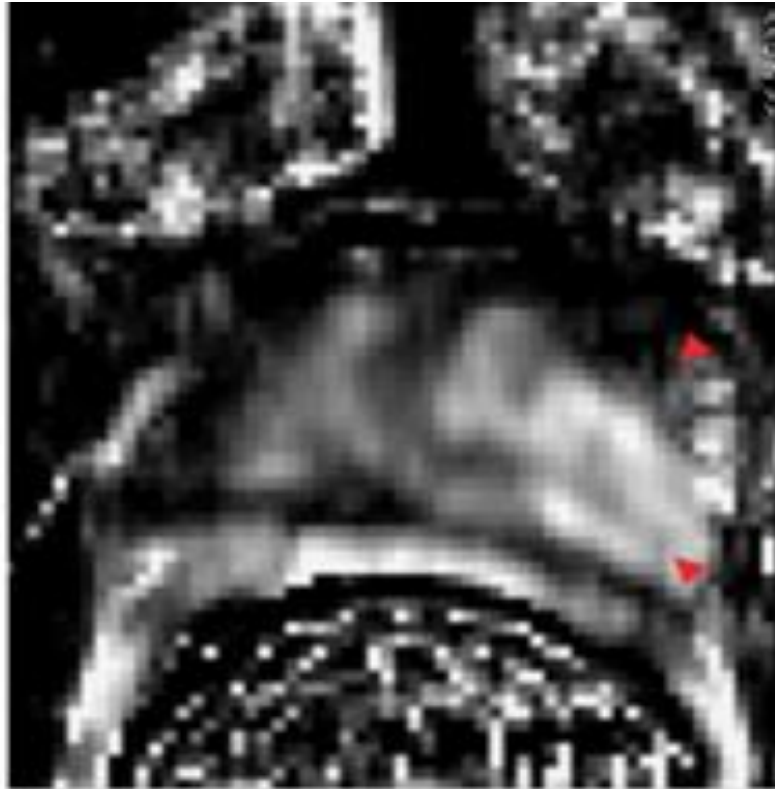




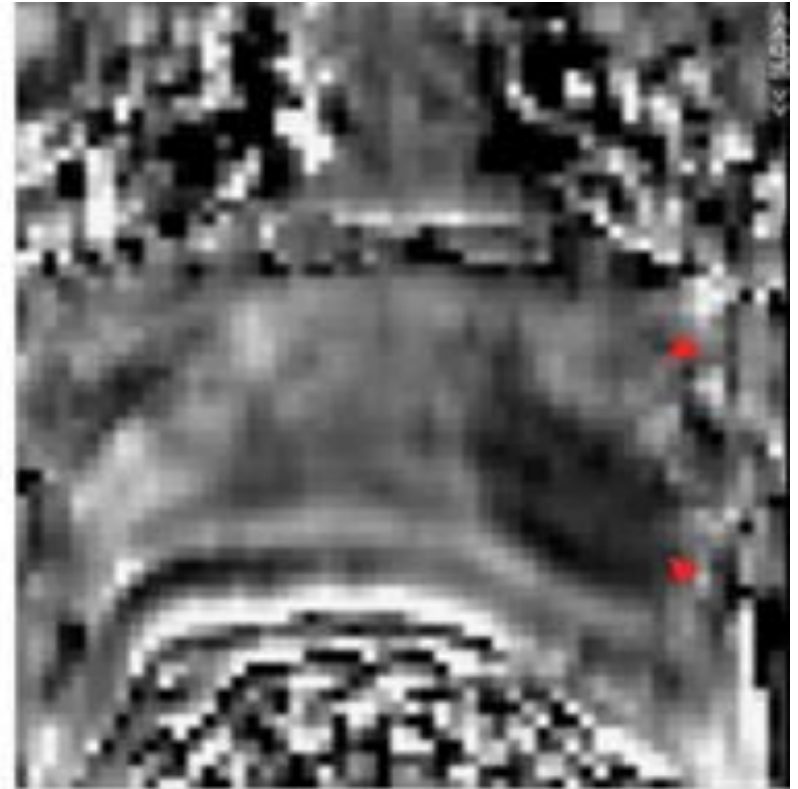
Diffusion weighted imaging (DWI) MRI



Dynamic contrast enhanced (DCE) MRI



DCE Washout Image



DCE Uptake Image



PI-RADSv2 Classification

(prostate imaging - reporting and data systems)

- Lesions graded according to a classification system.
- **PI-RADS I** – very low (Clinically significant cancer is highly unlikely)
- **PI-RADS II** – low (clinically significant cancer is unlikely)
- **PI-RADS III** – intermediate (presence of clinically significant cancer is equivocal)
- **PI-RADS IV** – high (clinically significant cancer is likely present)
- **PI-RADS V** – very high (clinically significant cancer is highly likely to be found)
- www.acr.org/Quality-Safety/Resources?PIRADS



Risk stratification

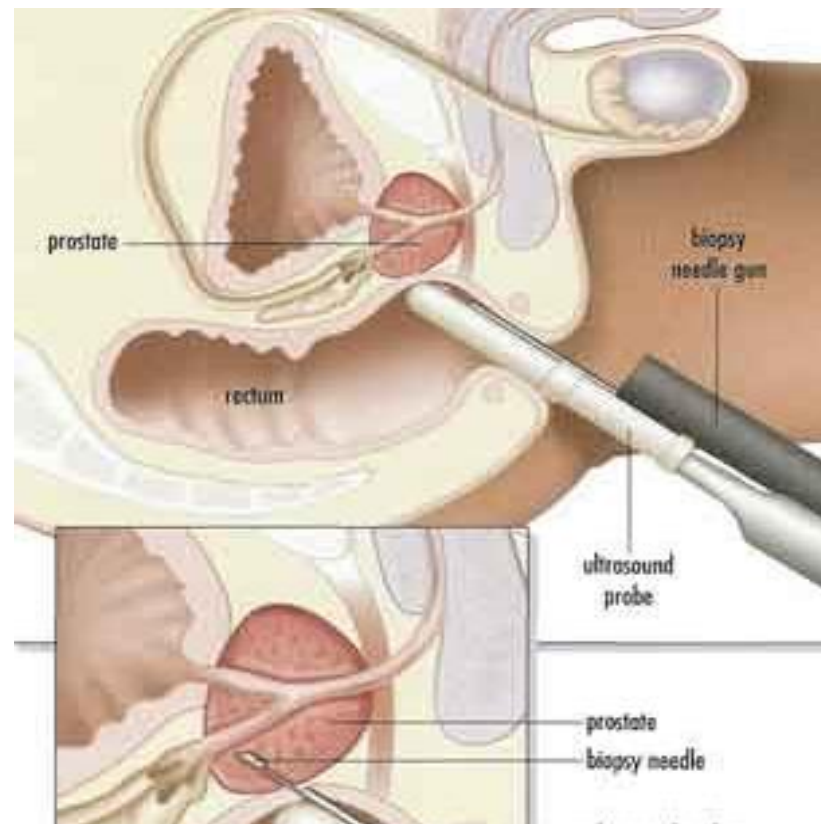
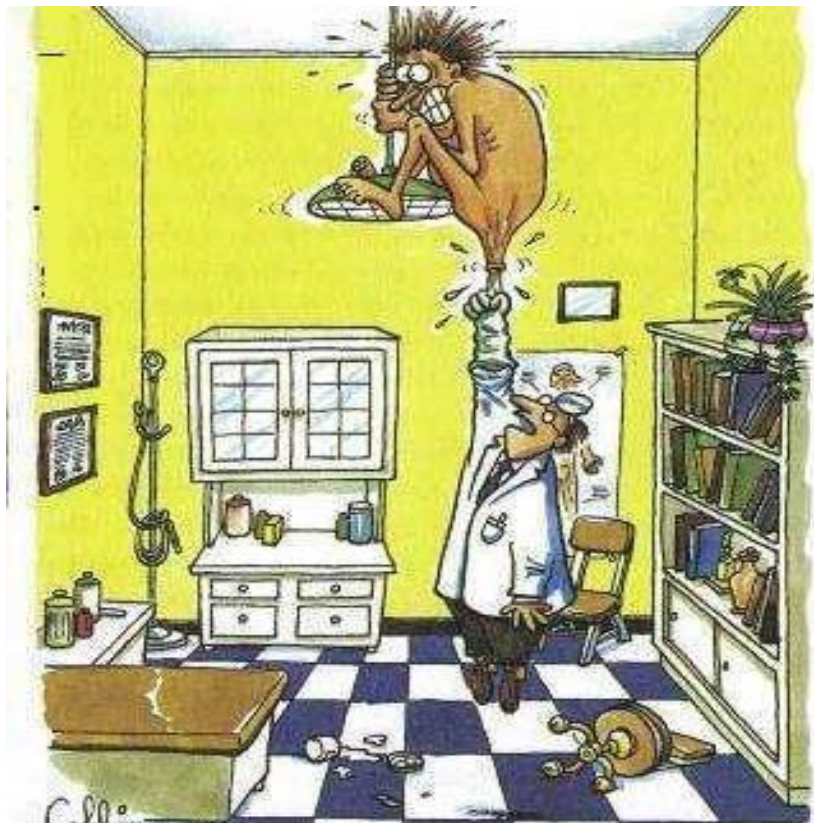
- High risk – Genetics, PSA, DRE, MRI lesions
- Low risk – No lesions on MRI
- Over diagnosis / over-treatment



Prostate Biopsy

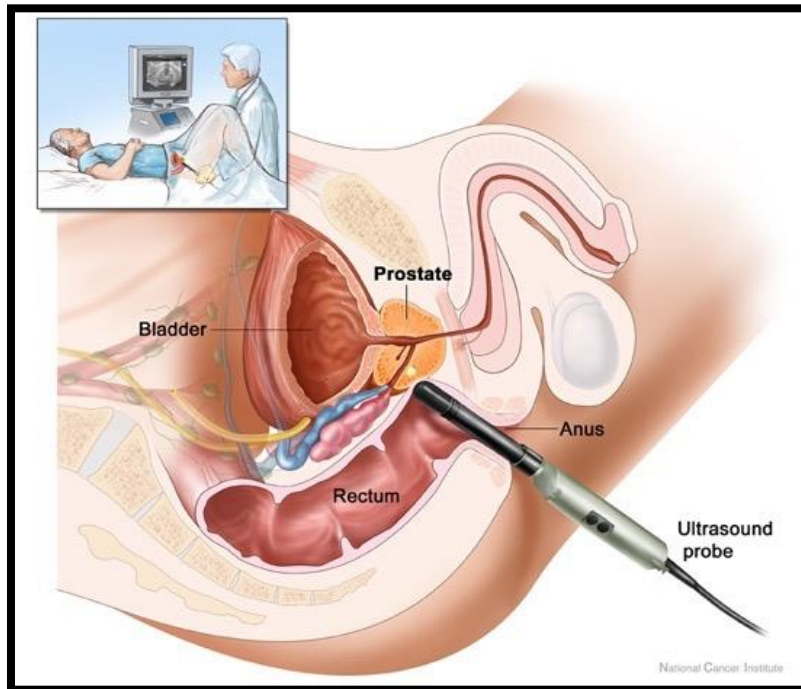


Standard TransRectal biopsy

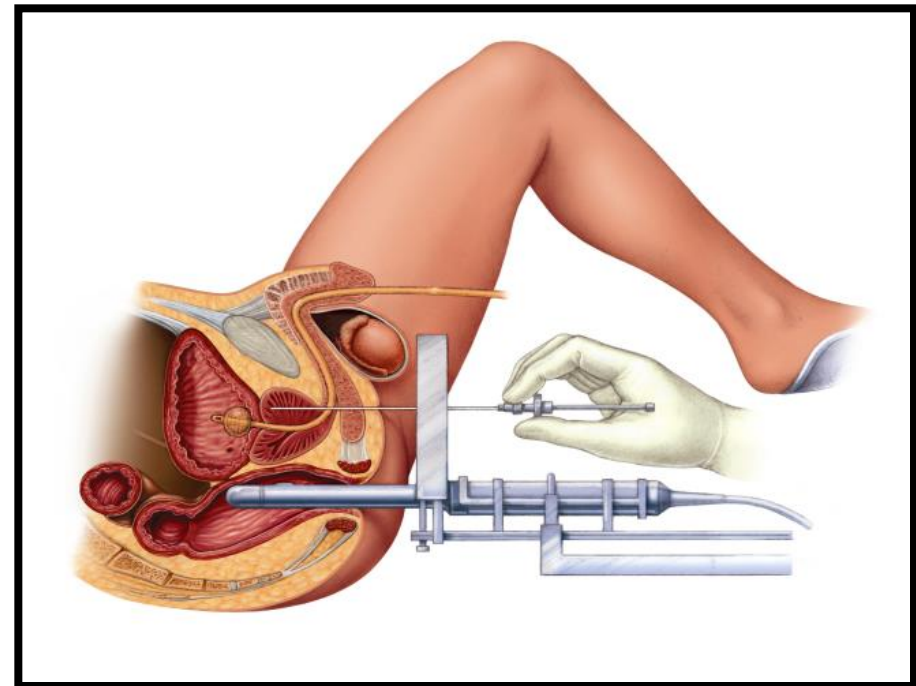


Trans-Perineal Prostate Biopsy

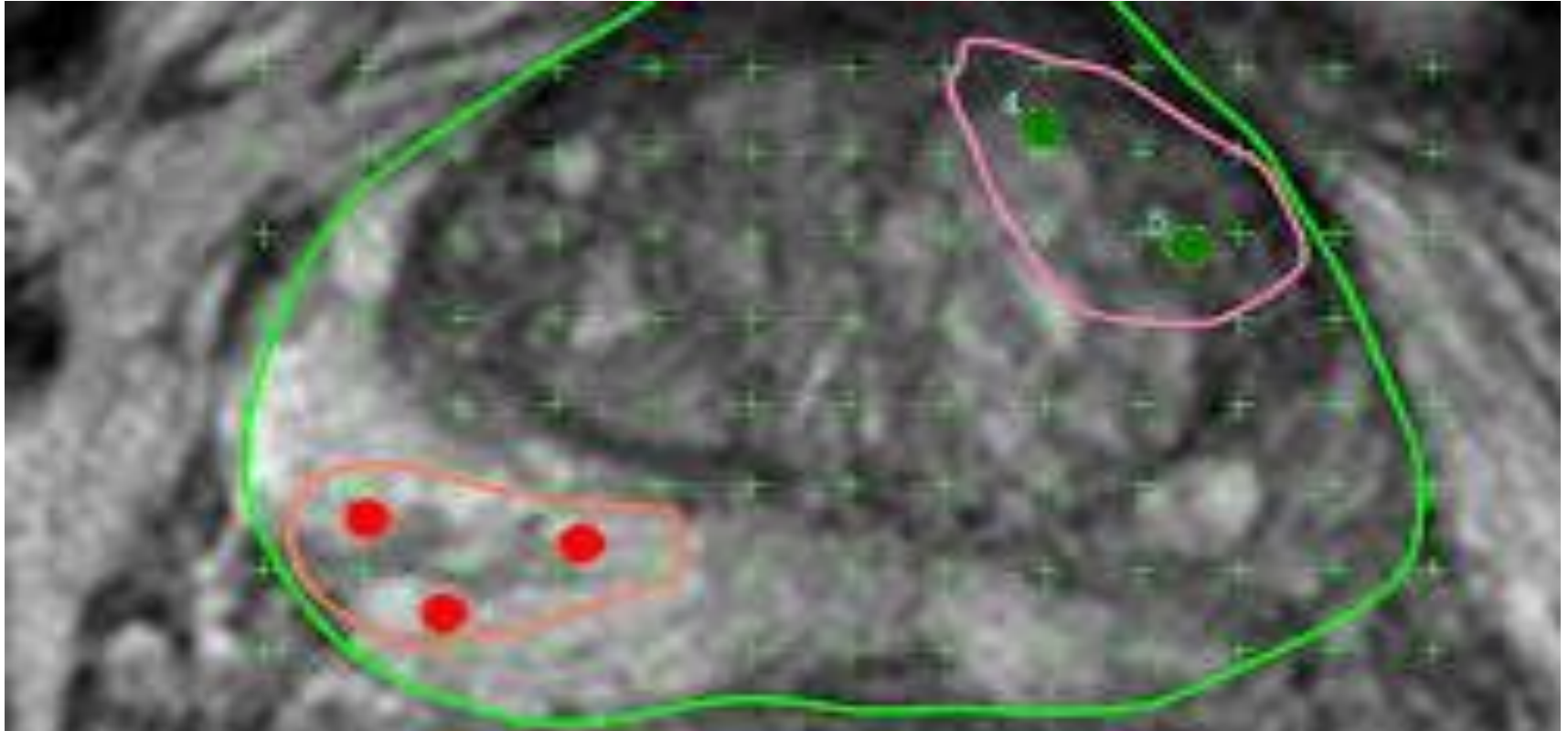
Trans-Rectal Biopsies



Trans-Perineal Prostate Biopsies



MRI Fusion Biopsy



RMH RAPID pathway

