



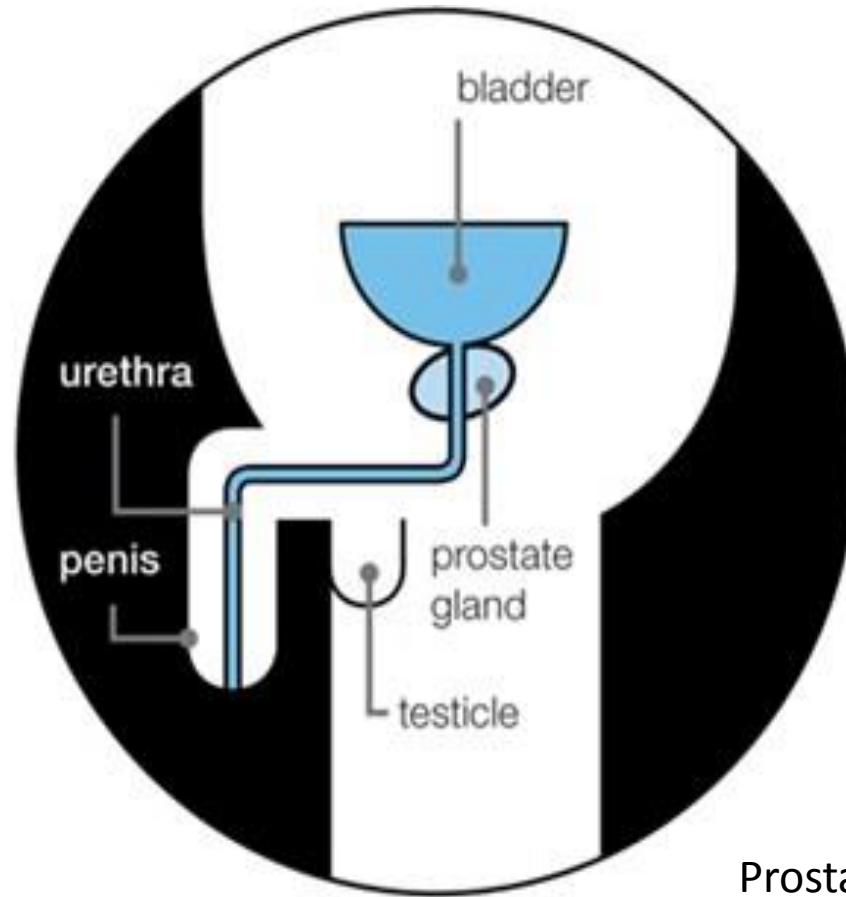
PROSTATE CANCER

Mr. Jawad Islam

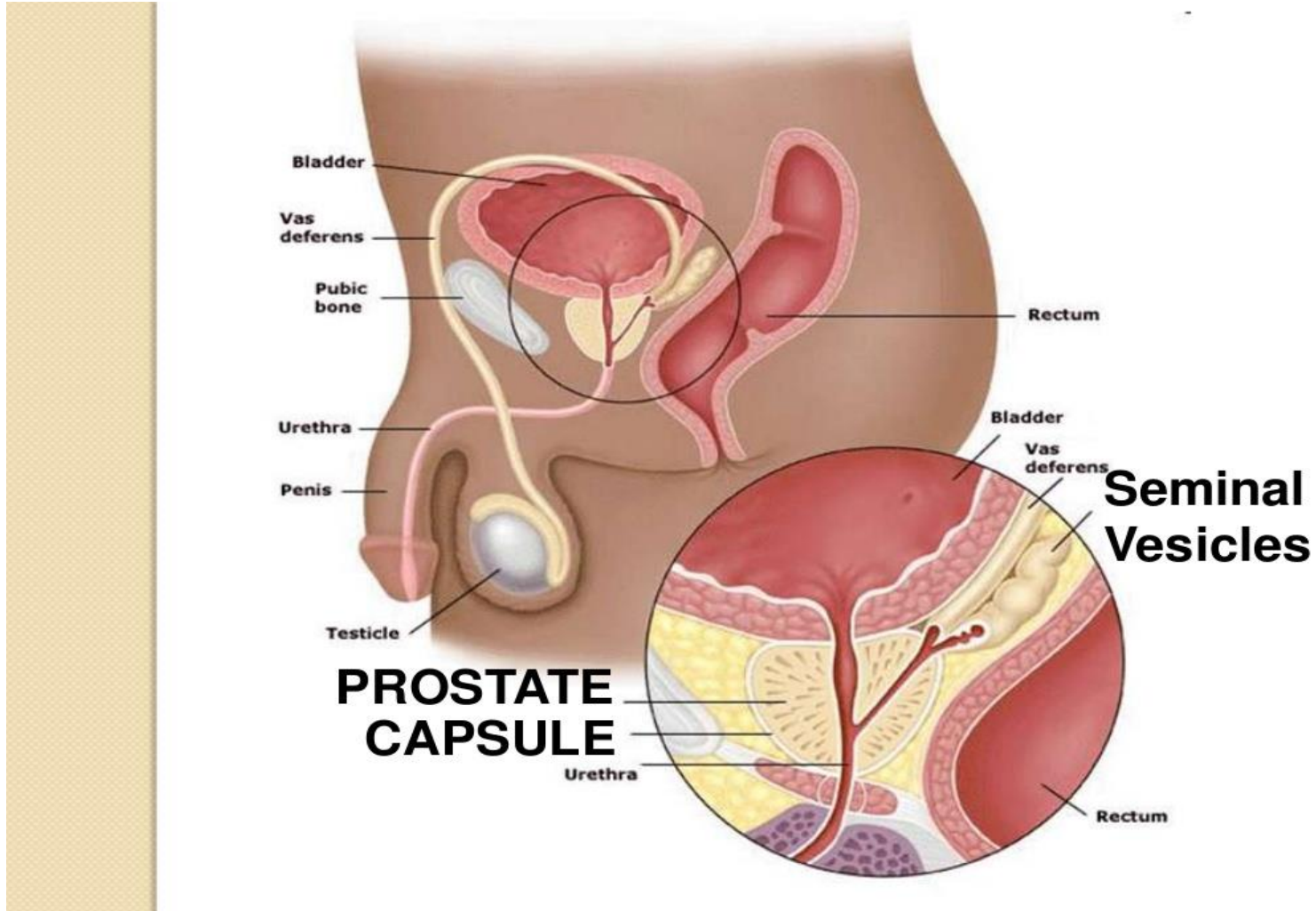
MBBS, MSc, FRCS(Ed), FEBU, FRCS(Urology)

Consultant Urologist

- Where is prostate located and what is its function?
- What is prostate cancer?
- How common is prostate cancer?
- What causes it?
- What are the risk factors?
- Can it be prevented?
- Tests to find early prostate cancer?
- How you stage prostate cancer?
- What treatments are available?



Prostatecanceruk.org



Function & problems of prostate

- It produces fluid which forms the part of semen.
- **THREE** main problems
 - Benign prostate hyperplasia
 - Prostatitis
 - Prostate cancer

What is prostate cancer?

- Every cell is dividing in an orderly fashion and in a controlled manner.
- When cell division becomes uncontrolled abnormal cells are produced - cancer cells

“GROWTH OF ABNORMAL CELLS”

Prostate cancer

- Cancer cells invade & damage normal tissue

How common is prostate cancer?

- Most common cancer in male in UK.
- 40,000 new cases diagnosed every year (110 cases/day)
- 250,000 men living with prostate cancer.
- Worldwide, 1.11 million cases diagnosed in 2012.
- Lifetime risk: 1 in 8

Prostatecanceruk.org, cancerresearchuk.org

How many die from Prostate cancer?

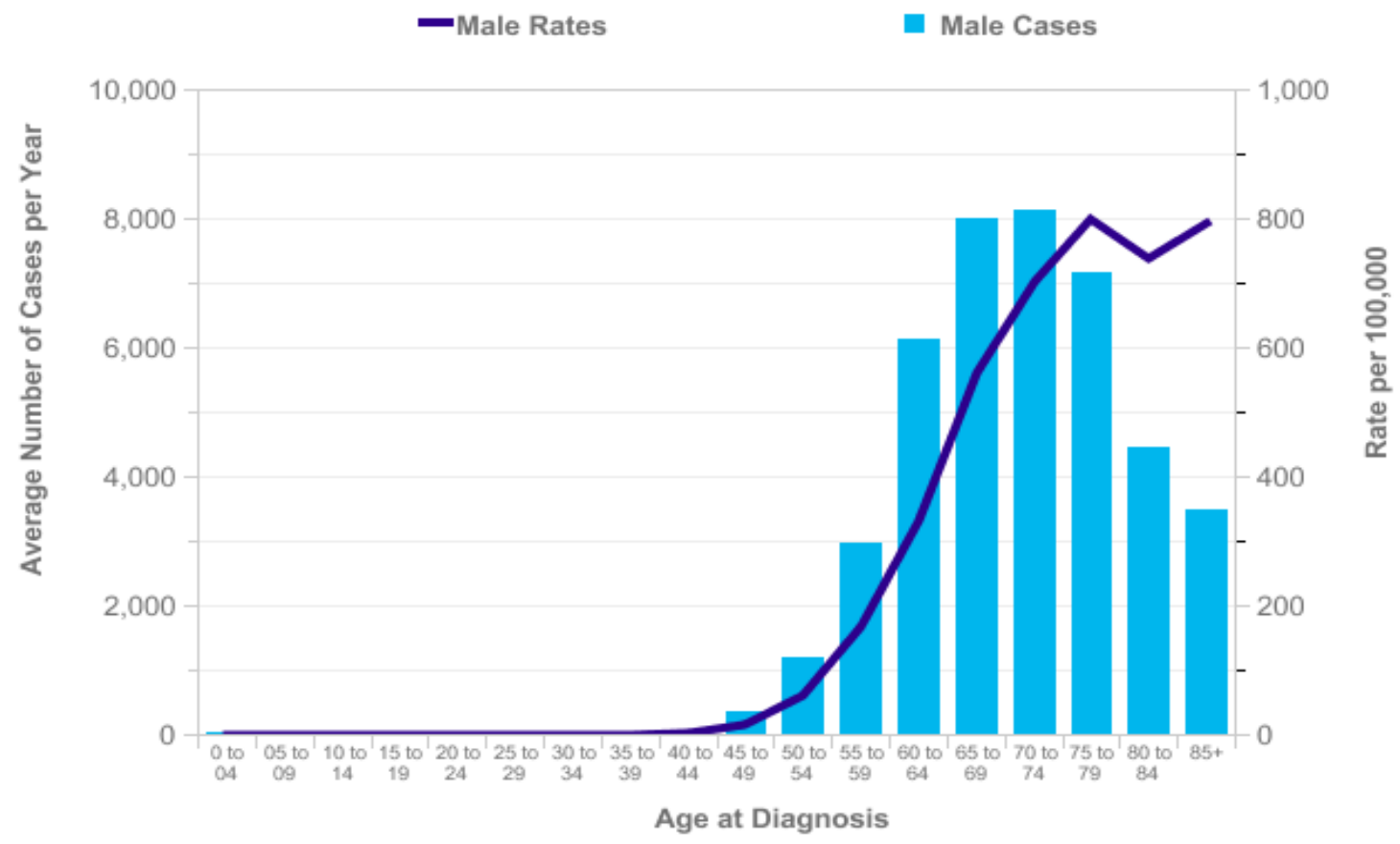
- Second most common cause of death after lung cancer.
- 10,800 men died in 2012 (30 every day)
- 1970 ---- 4 in 10 survived beyond 5 years
- 2012 ---- 8 in 10 Survived beyond 5 years

cancerresearchuk.org

What causes prostate cancer?

AGE

RISK FACTORS



cancerresearchuk.org

RISK FACTORS

- Family History

Father, brother	----	2 to 3 times
Diagnosed <60 years	---	3 to 4 times
Mother with Breast cancer		
BRCA2 gene	----	5 to 7 times

Inheritance of Faulty gene

cancerresearchuk.org

RISK FACTORS

- Black African ----- 2 to 3 times
- Obesity
- High calcium diet
- vasectomy

SCREENING OF PROSTATE CANCER

“Finding the disease when there are no s/s”.

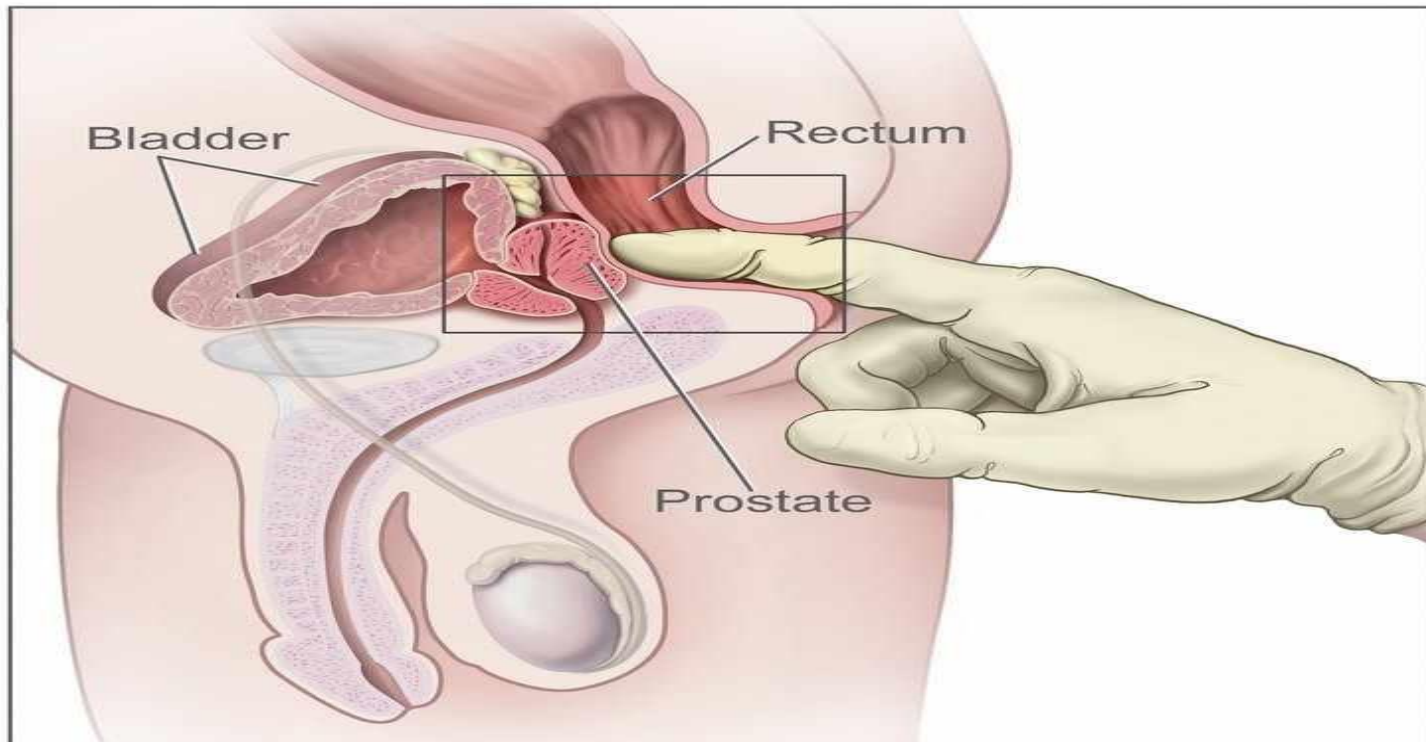
- Screening finds the cancers in early stage
- Prostate cancer screening
 - PSA (prostate specific antigen)
 - DRE (digital rectal examination)

PSA

- Made in prostate cells
- Measured with Blood test
- Normal Value <4ng/ml (Age dependent)
- PSA can be increased in:
 - Prostate cancer
 - Prostatitis / UTI
 - Benign Enlargement of prostate
- Prostate specific but not cancer specific

DIGITAL RECTAL EXAMINATION

- Lubricated gloved finger
- Hardness, lump or bumps of prostate



PROSTATE CANCER SCREENING

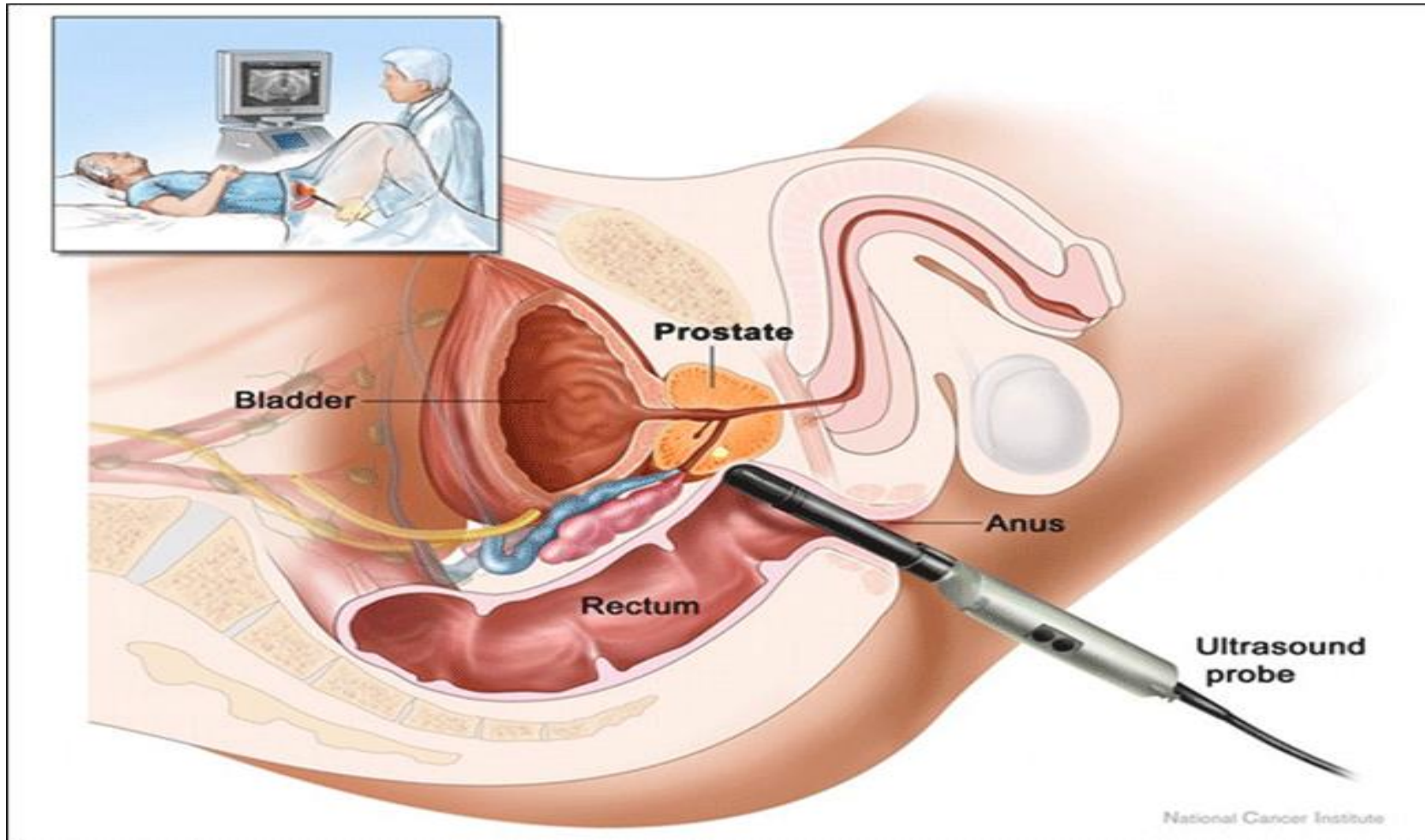
- PSA is prostate specific, not cancer specific.
- PSA sensitivity 80%, Specificity 40%
- DRE ---- not very accurate

PROSTATE CANCER SCREENING

- Many big trials (European, PLCO)
- Tests are not accurate
- Does not reduce mortality

Hence not recommended in UK

PROSTATE BIOPSY



DIAGNOSIS

Prostate Biopsy

ADENOCARCINOMA PROSTATE

GLEASON SCORE

Low Grade	2 to 6
Moderate Grade	7
Severe Grade	8 to 10

STAGING OF PROSTATE CANCER

- Localized
- Locally Advance
- Metastatic

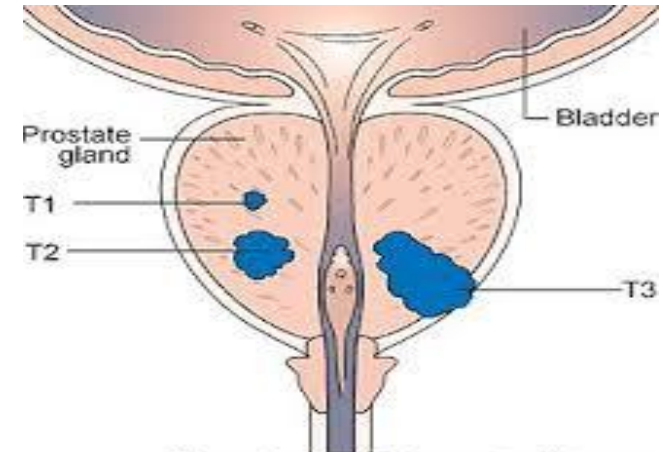
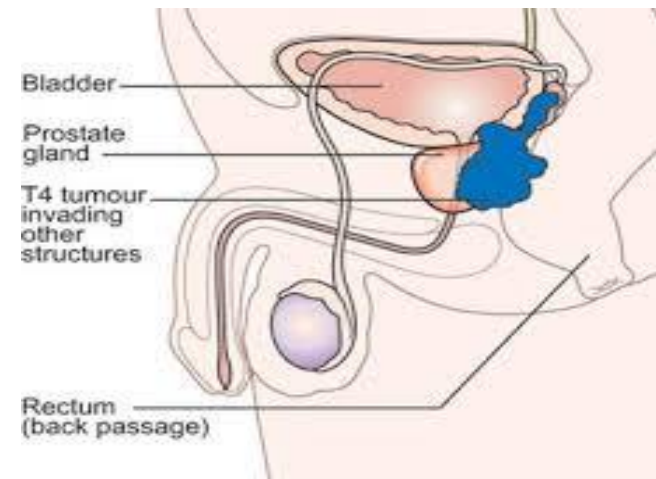
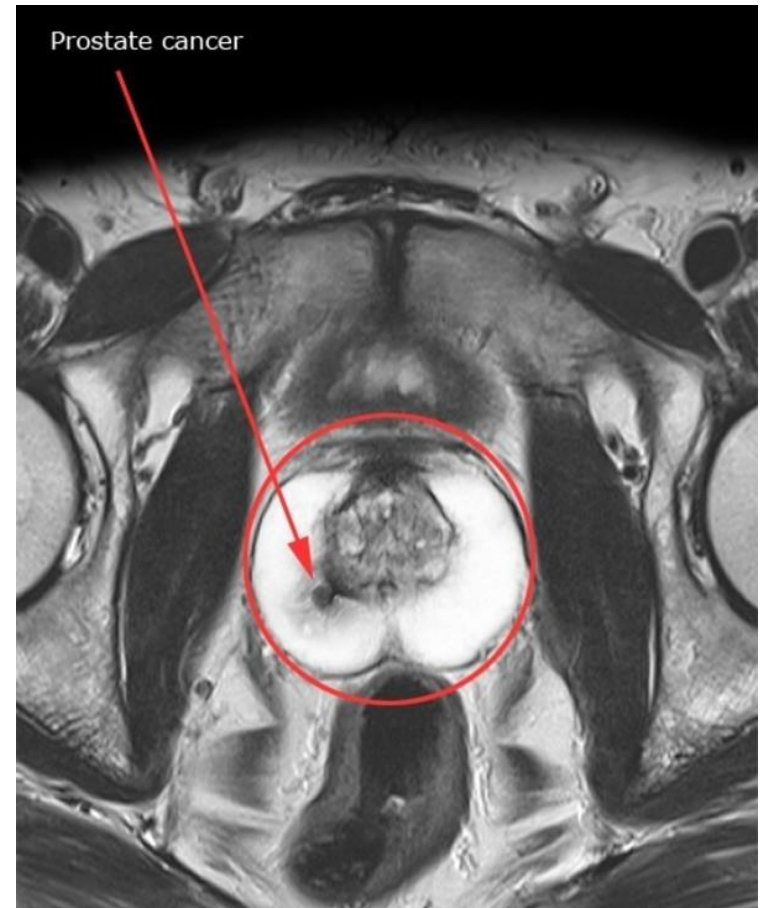
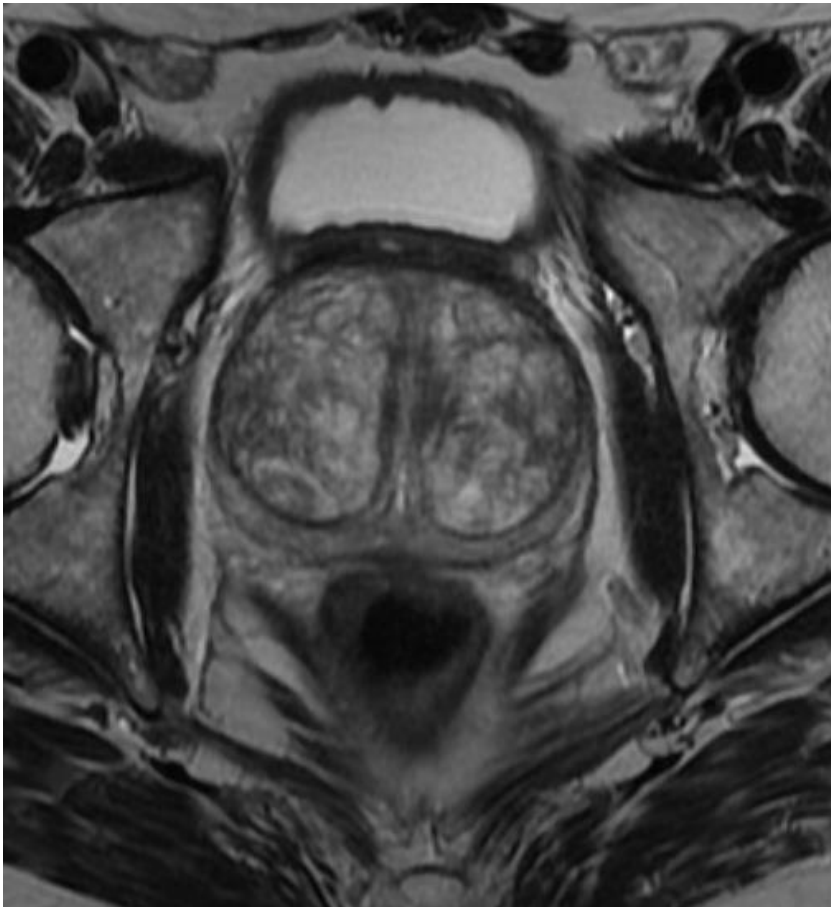


Diagram showing T1-3 stages of prostate cancer
© CancerHelp UK

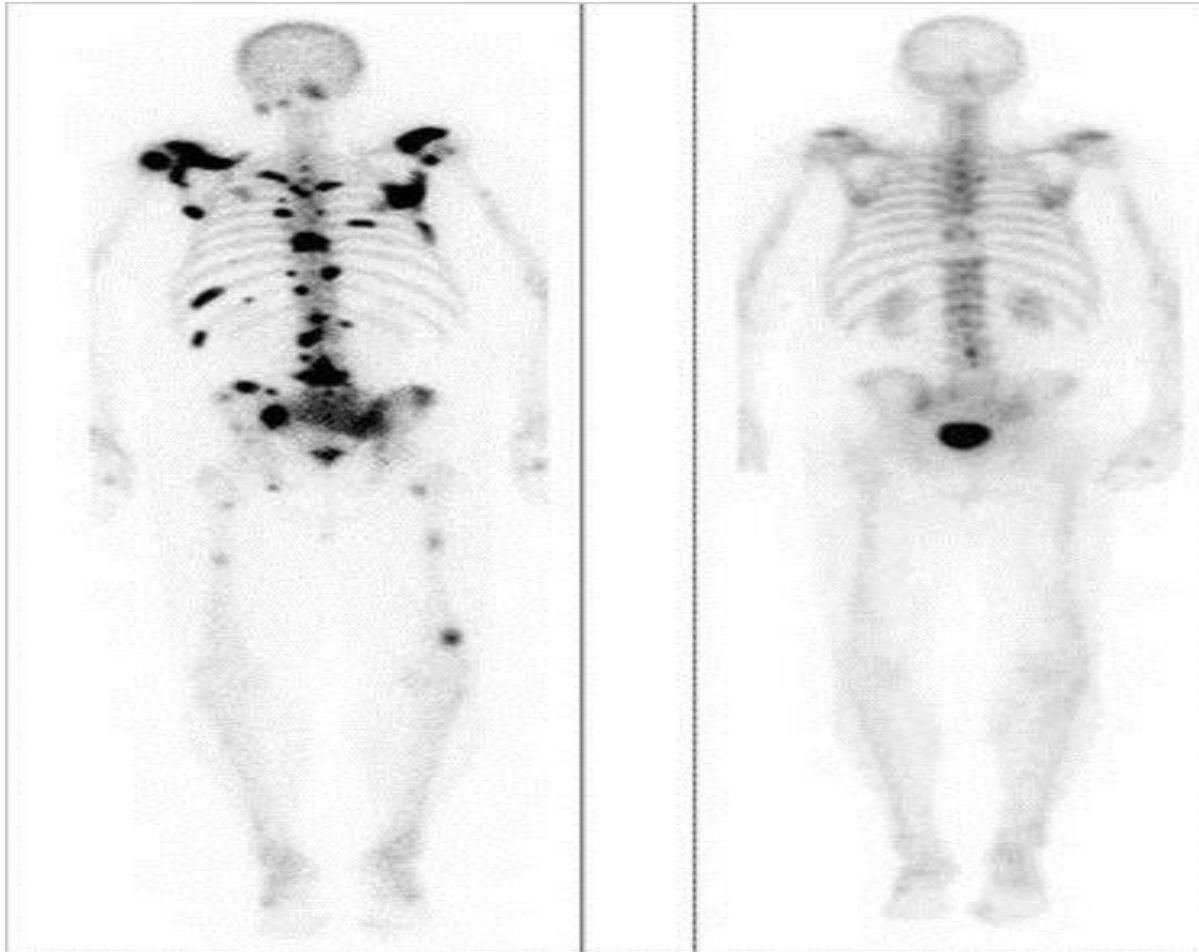


Cancer Research UK

MRI PROSTATE



BONE SCAN



TREATMENT OPTIONS

1. ACTIVE SURVILLANCE
2. SURGERY
3. RADIOTHERAPY
4. HORMONAL TREATMENT

ACTIVE SURVILLANCE

- Localised cancer
- Low grade
- Small volume

- Monitor PSA
- Repeat prostate biopsy in 1 year
- Treatment if disease gets worse

SURGERY

RADICAL PROSTATECTOMY

- Localised prostate cancer
- Low or moderate grade
- Any volume

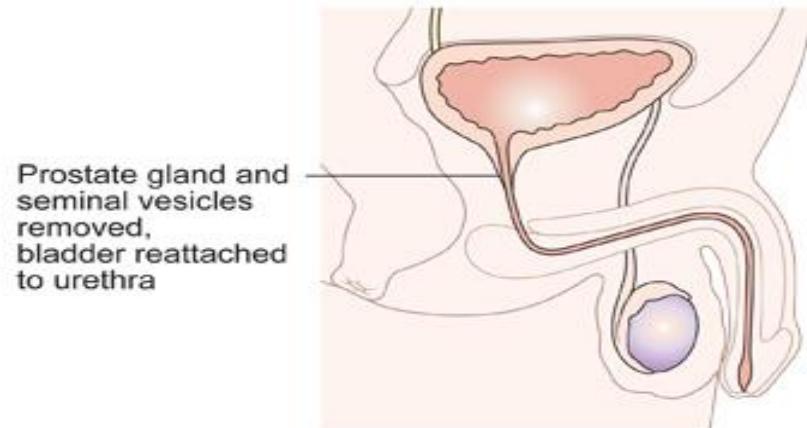
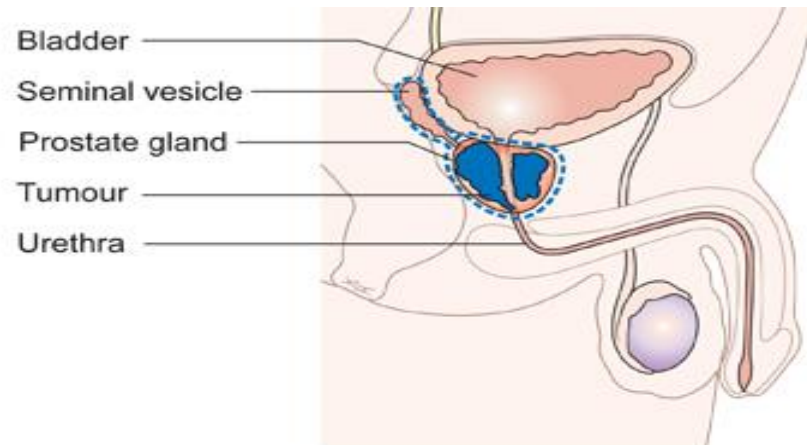
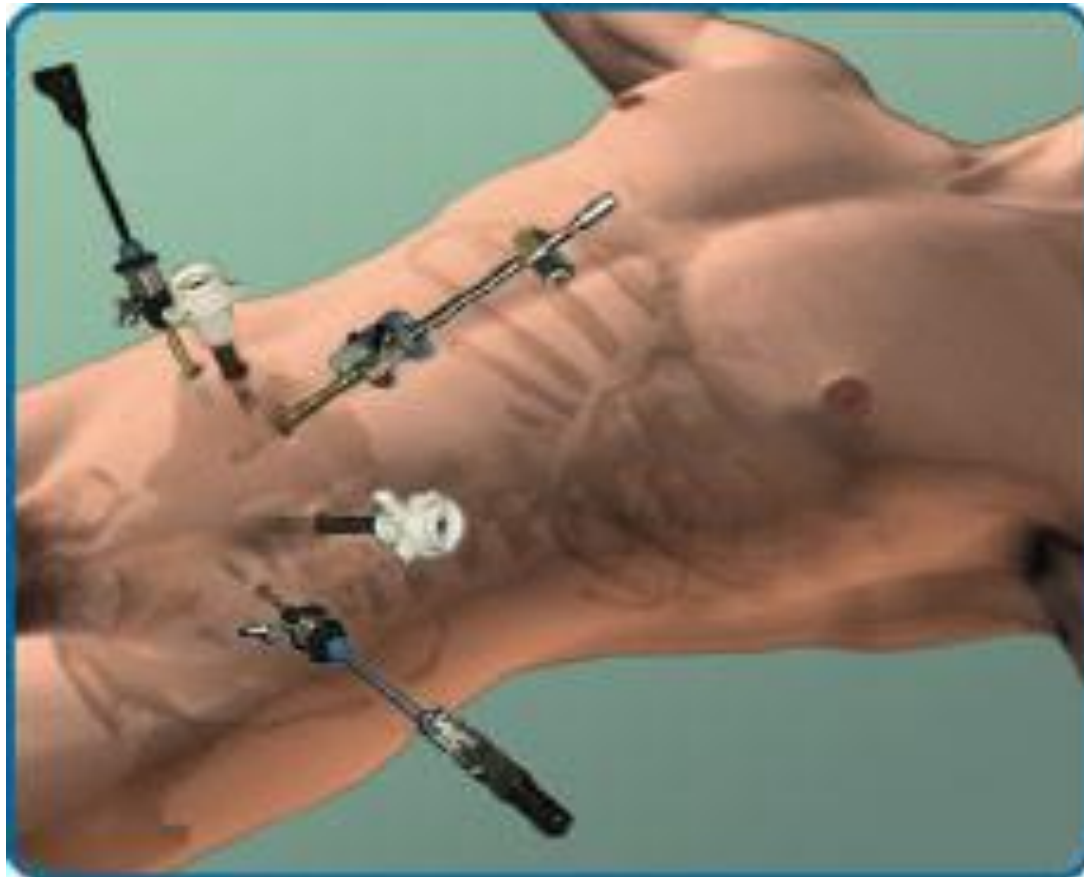


Diagram showing before and after a radical prostatectomy
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ROBOTIC RADICAL PROSTATECTOMY

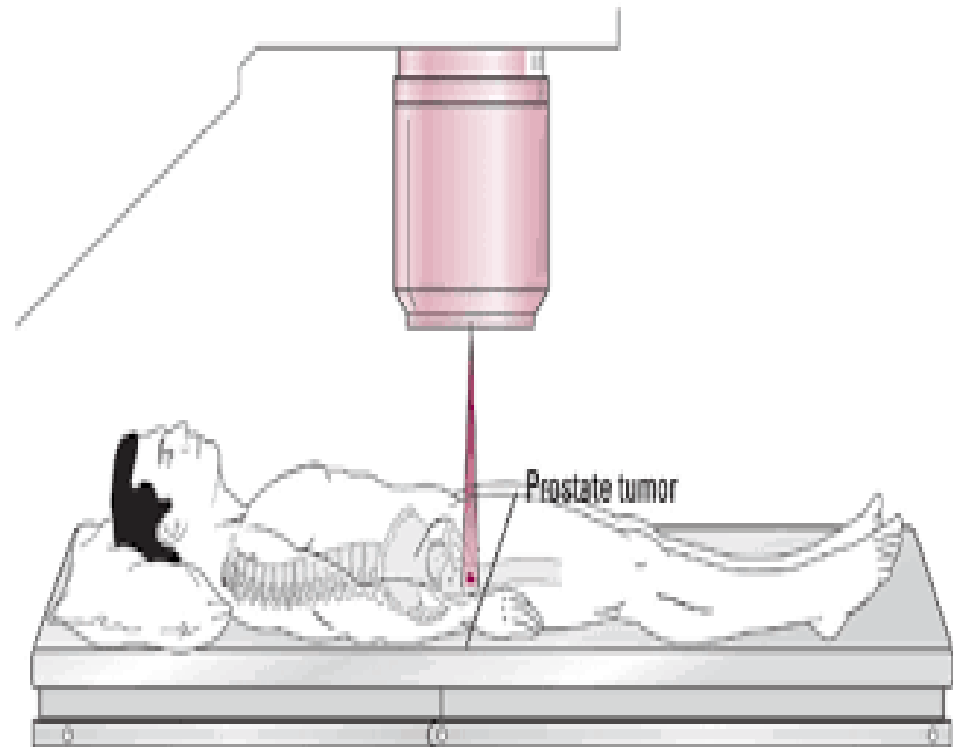


LAPROSCOPIC RADICAL PROSTATECTOMY



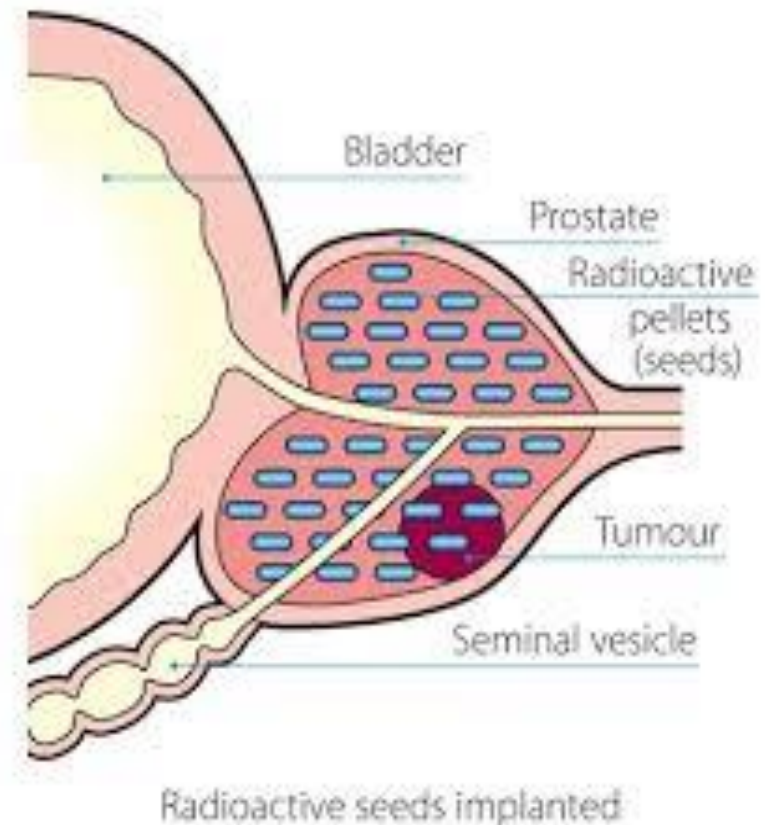
RADIOTHERAPY

- Locally advanced cancer
- Moderate to high grade
- Any volume



BRACHYTHERAPY

- Localised cancer
- Low to moderate grade
- Low Volume



HORMONE TREATMENT *INJECTIONS*

- Metastatic cancer
- Cuts of Testosterone
- Usually given 3 monthly
- Not curative



CHEMOTHERAPY

- Metastatic disease not controlled with hormonal treatment.
- Fit patients
- Palliative care

PROSTATE CANCER

Blackpool Victoria Hospital

2014

- Newly Diagnosed cases 173
- Ref. Routes (Fast track, consults, A&E)
- TREATMENT
 - 26 Patients Active Monitoring (BVH)
 - 122 Hormone Therapy (BVH)
 - 20 Radical Prostatectomy (Lanc Teaching Hospital)
 - 2 Radiotherapy (Lancashire Teaching Hospitals)
 - 3 Surgery (The Christie)



THANK YOU





Next Members Seminar Depression Awareness Week

Wednesday, 15th April 2015

10 – 11 am

Lecture Theatre, Education Centre,
BVH.