

Prostate Cancer

Christopher Anderson
Consultant Urologist
St Georges Hospital
18 November 2020



Prostate Cancer

Commonest cancer killer in men over 50

48,000 New cases per year

9,000 Deaths per year

One in ten chance of CaP

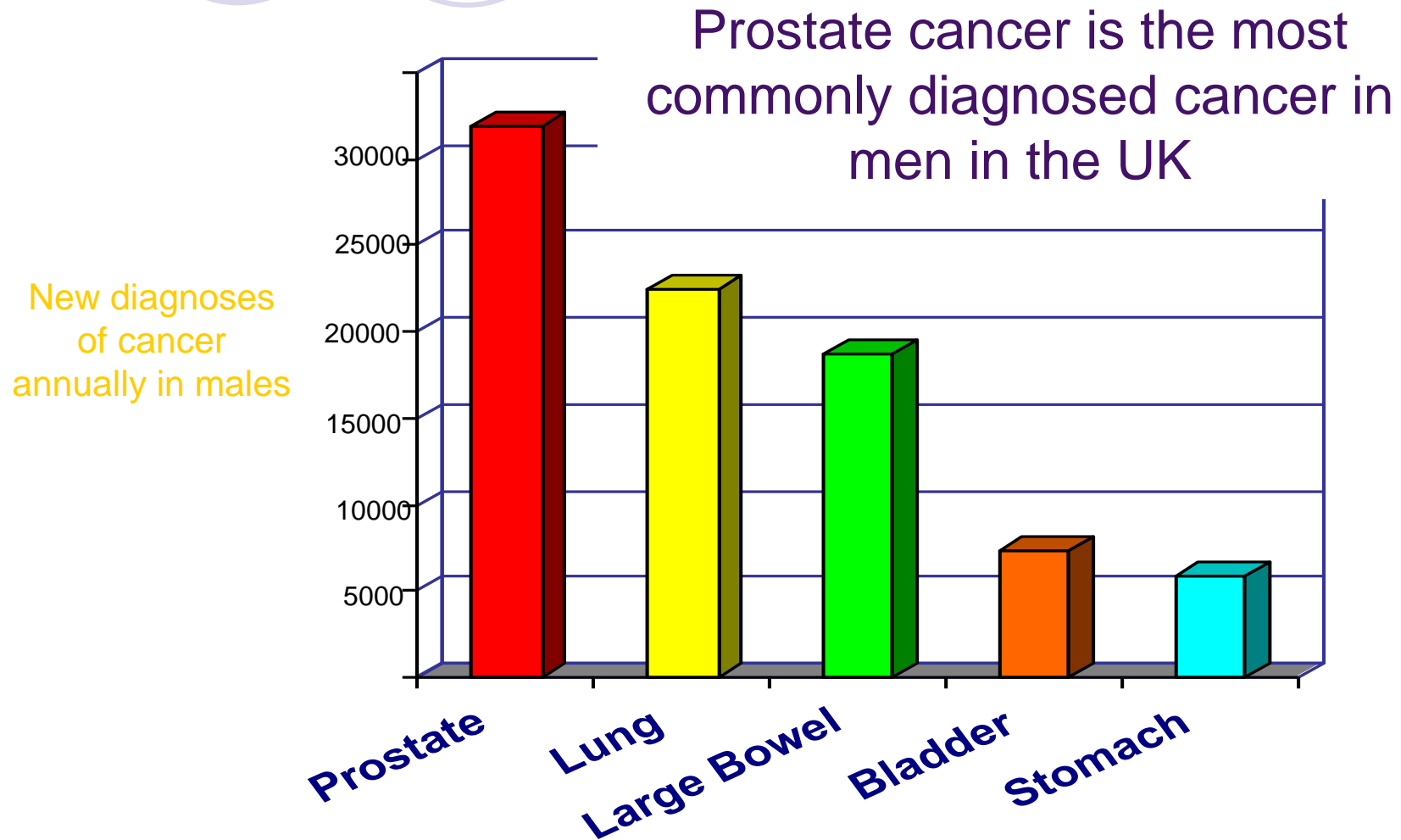
Commonest cancer killer in men over 50

48,000 New cases per year

70% diagnosed after 65y

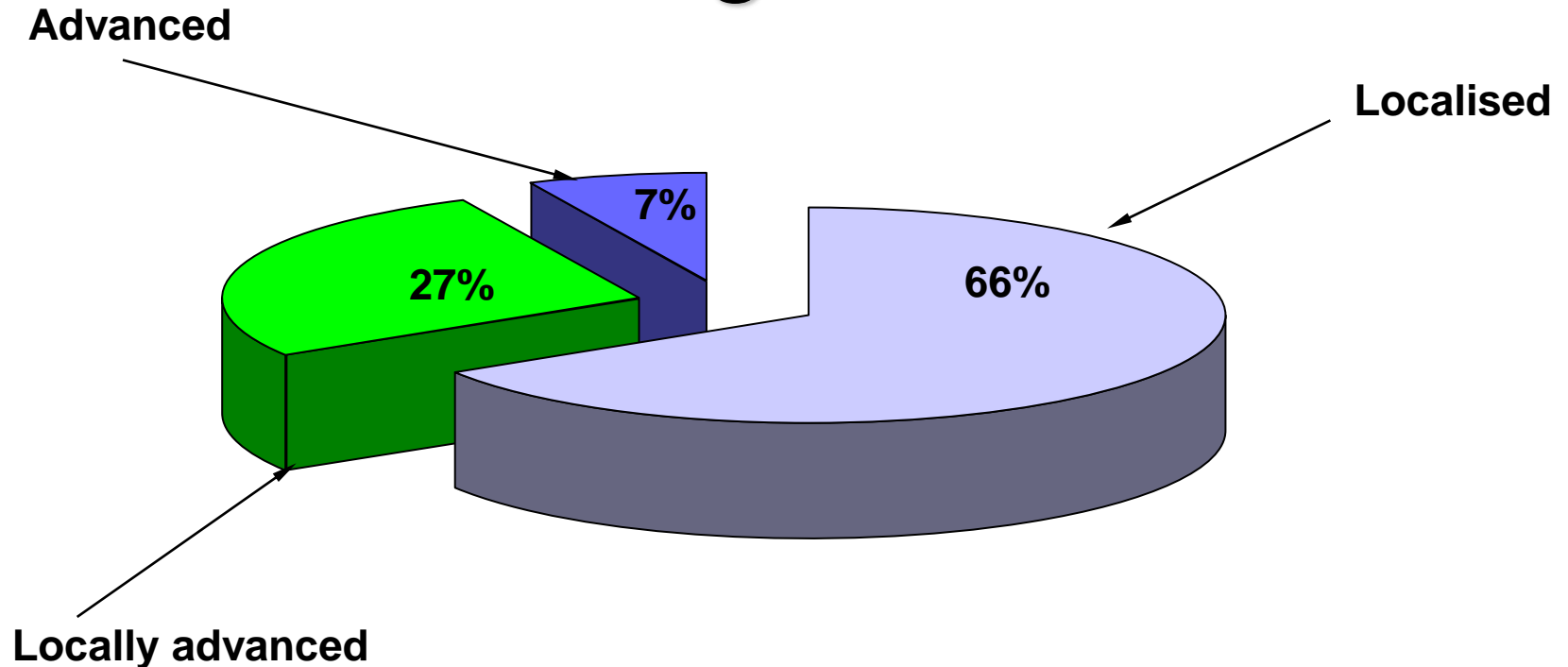
9,000 Deaths per year

Epidemiology Incidence

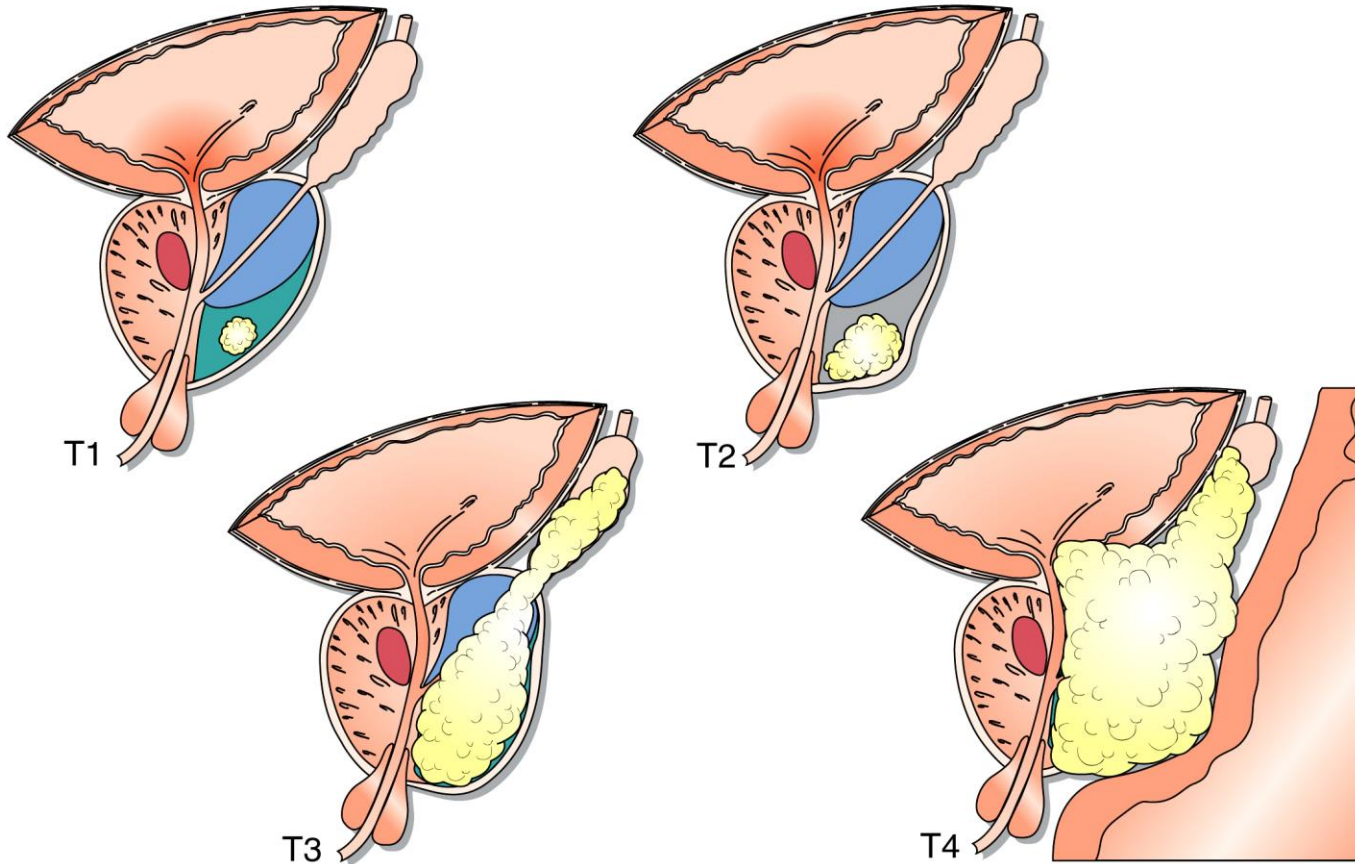


Main stages of Prostate Cancer

at diagnosis ¹



Staging of localised prostate cancer



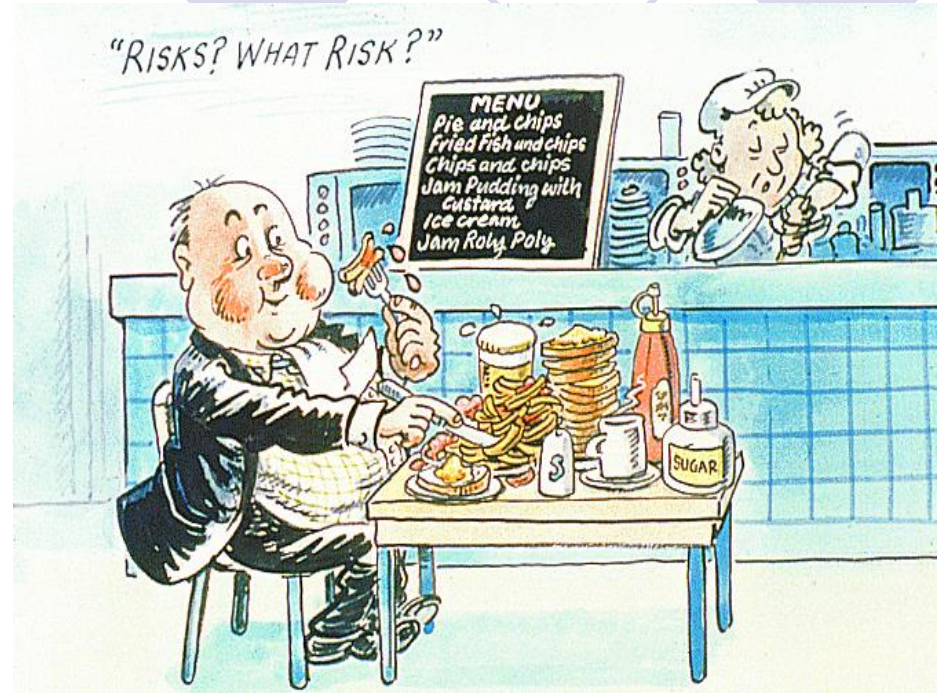


A patient's perspective....

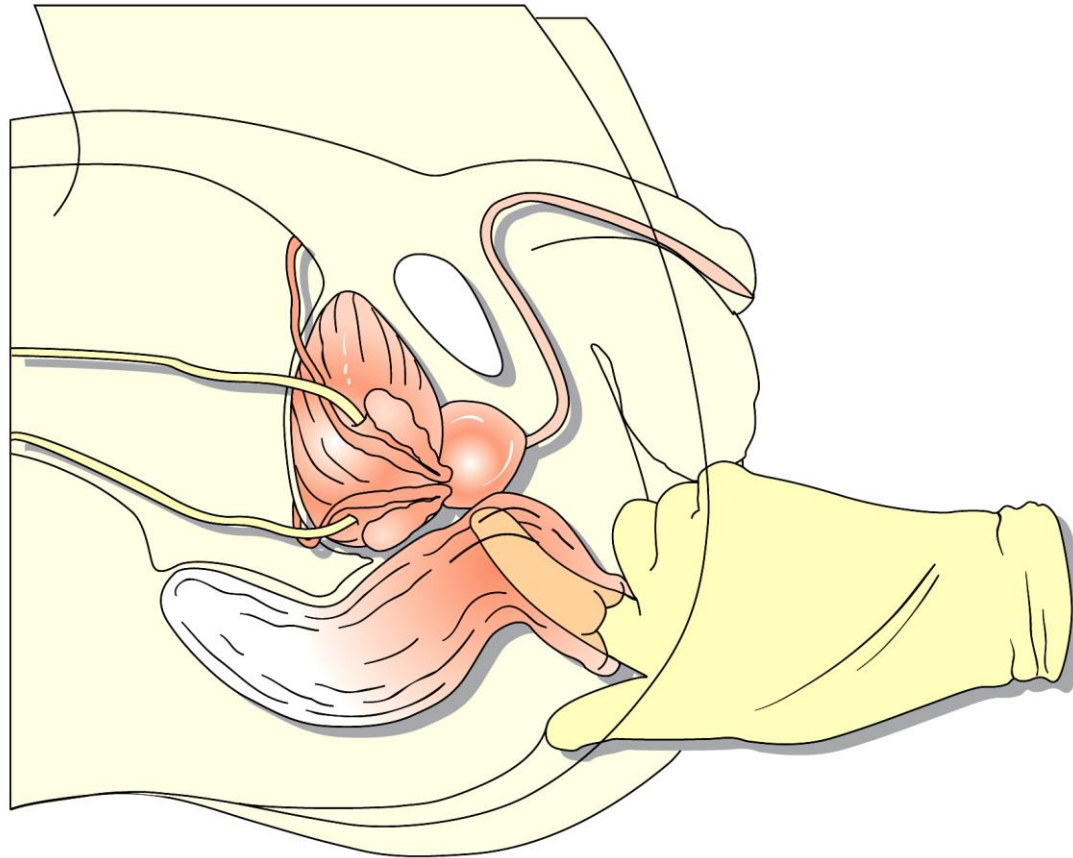
- Many men do not know where the prostate gland is – never mind what it does!
- Must not forget how embarrassing our patients find these examinations
- Women tend to be more used to internal examinations – may be useful resource for encouraging partners to present

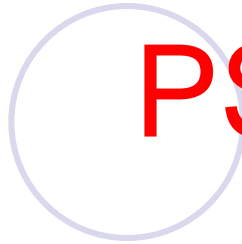
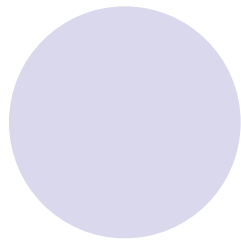
Dietary prevention ?

- Selenium
- Lycopene
- Soya
- Broccoli
- Pomegranate juice
- Green tea
- salmon, tuna and herring — omega-3 fatty acids
- fats from animals

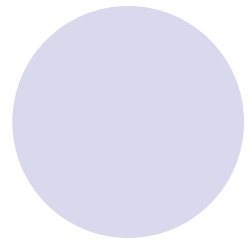
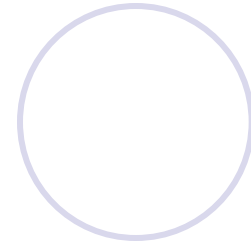
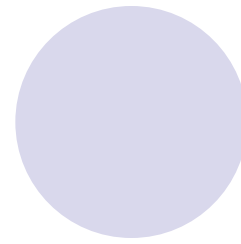


Digital Rectal Examination





PSA



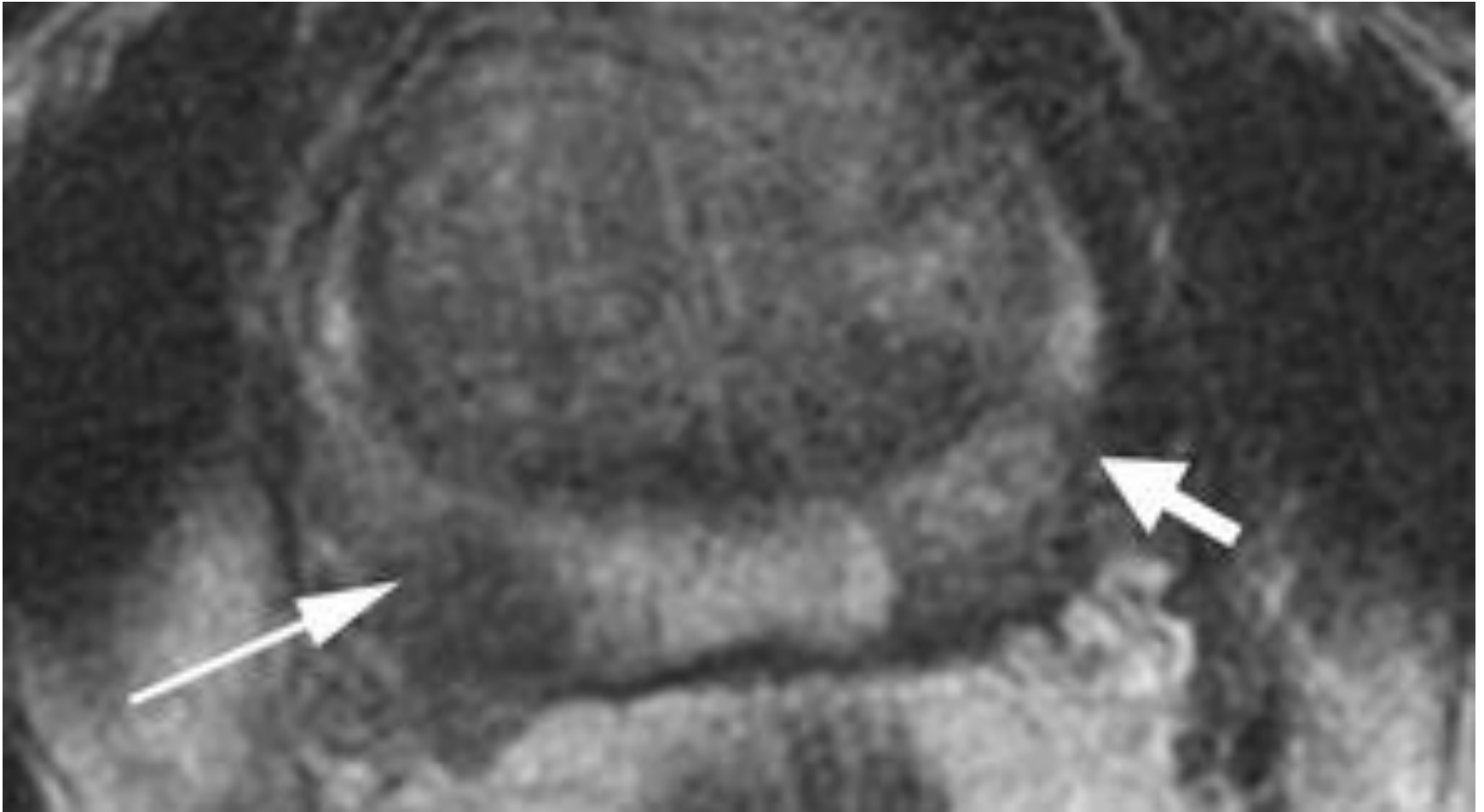
Advantages

- Superior to DRE for its predictive value
- Can detect more prostate cancers than DRE alone
- More culturally acceptable than DRE

Disadvantages

- Elevated PSA is not specific for prostate cancer
- A raised PSA level can be caused by many other conditions: BPH, infection, instrumentation,
- PSA levels alone may not identify men with organ- confined cancer
- PSA level alone lacks sensitivity and specificity for early diagnosis of prostate cancer

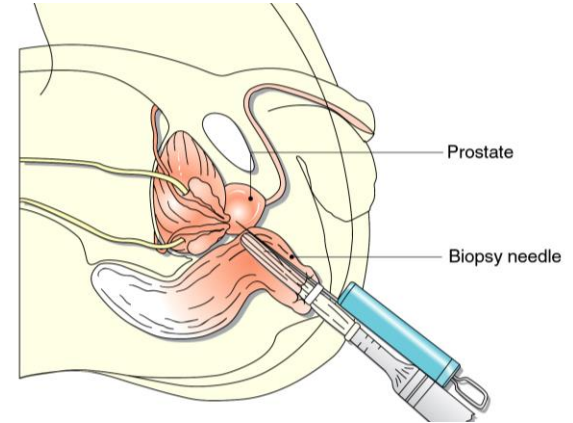
MRI Prostate : Initial investigation



Prostate Biopsy

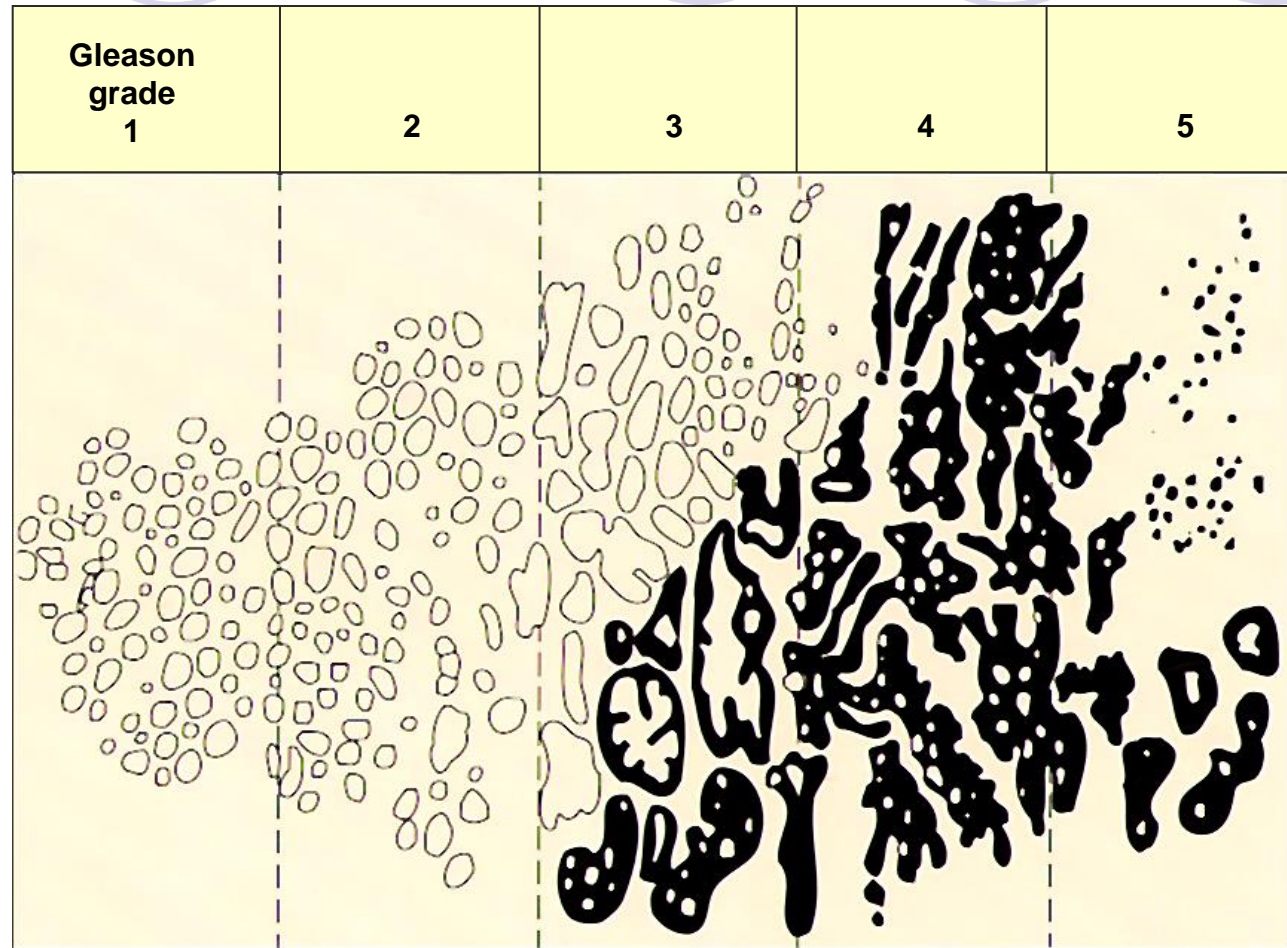


Transtrectal biopsy



Template biopsy

The Gleason grading system



Gleason score is calculated by summation of the two predominant areas.

1. Gleason DF, et al. Urologic Pathology: The Prostate;1977;p171-198

Treatment Choices Early Stage CaP

- ☐ Prostatectomy
- ☐ Radiation Therapy (Hormone Tx)
- ☐ Brachytherapy
- ☐ Surveillance
- ☐ Cryosurgery
- ☐ HIFU
- ☐ Proton beam



Prostate Cancer - Treatment

- Choice of treatment represents major source of anxiety for patients
- Many still wish the Dr to make choice for them, though must ensure all appropriate options are presented

Surveillance

Low volume , low stage and grade , elderly

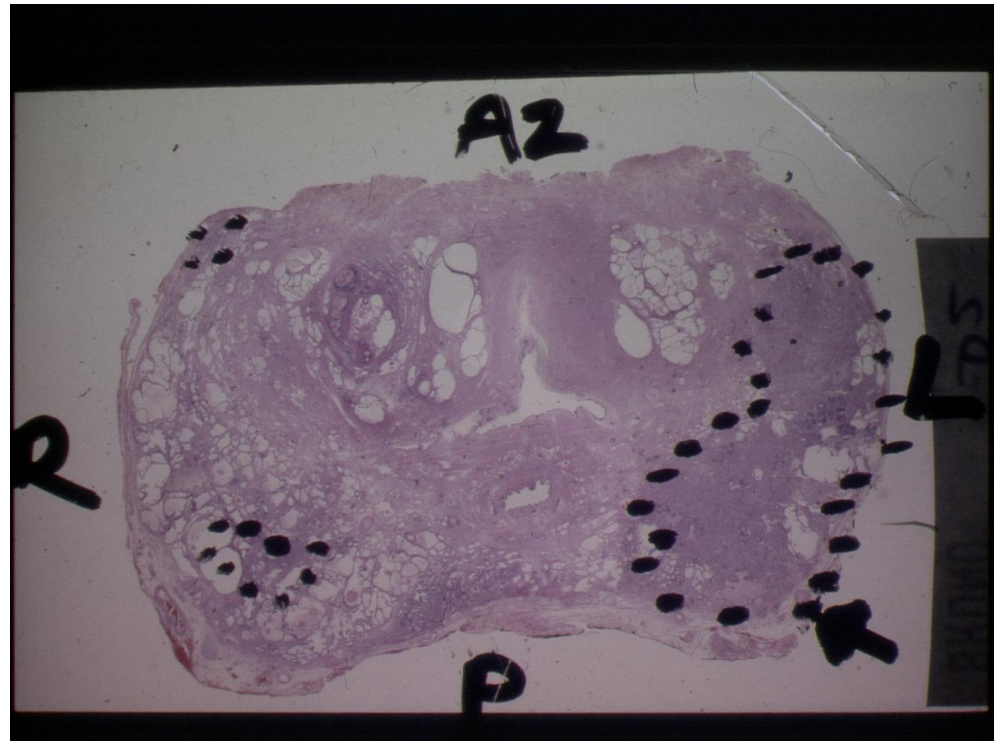


Objectives of surgery

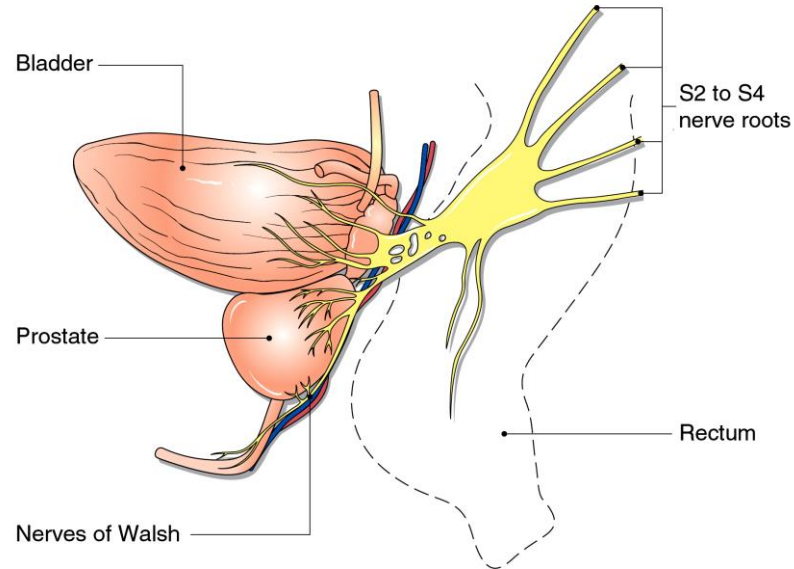
Cancer Control

Continence

Erectile function

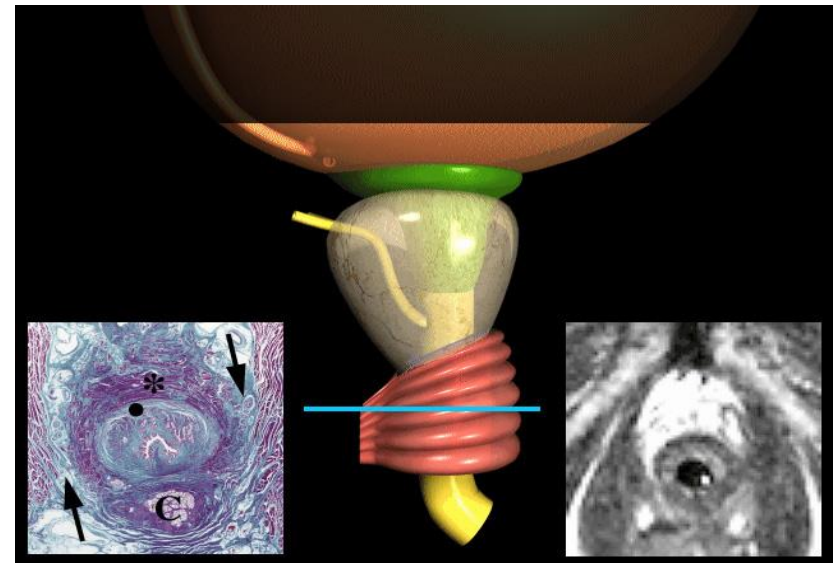


Preserving Continence and Erections : anatomy



Neurovascular bundle

External Sphincter



Laparoscopic instruments



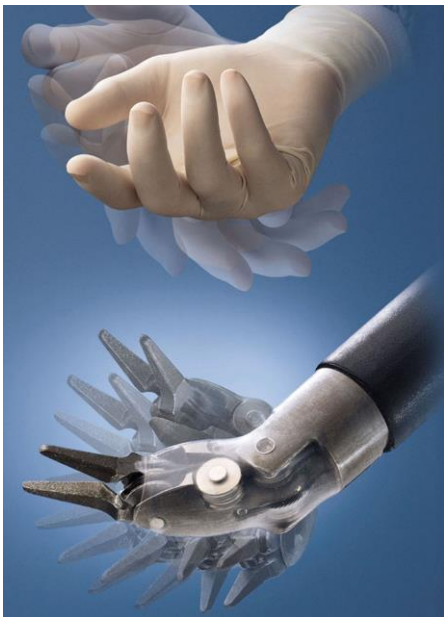
Limitations of conventional laparoscopy

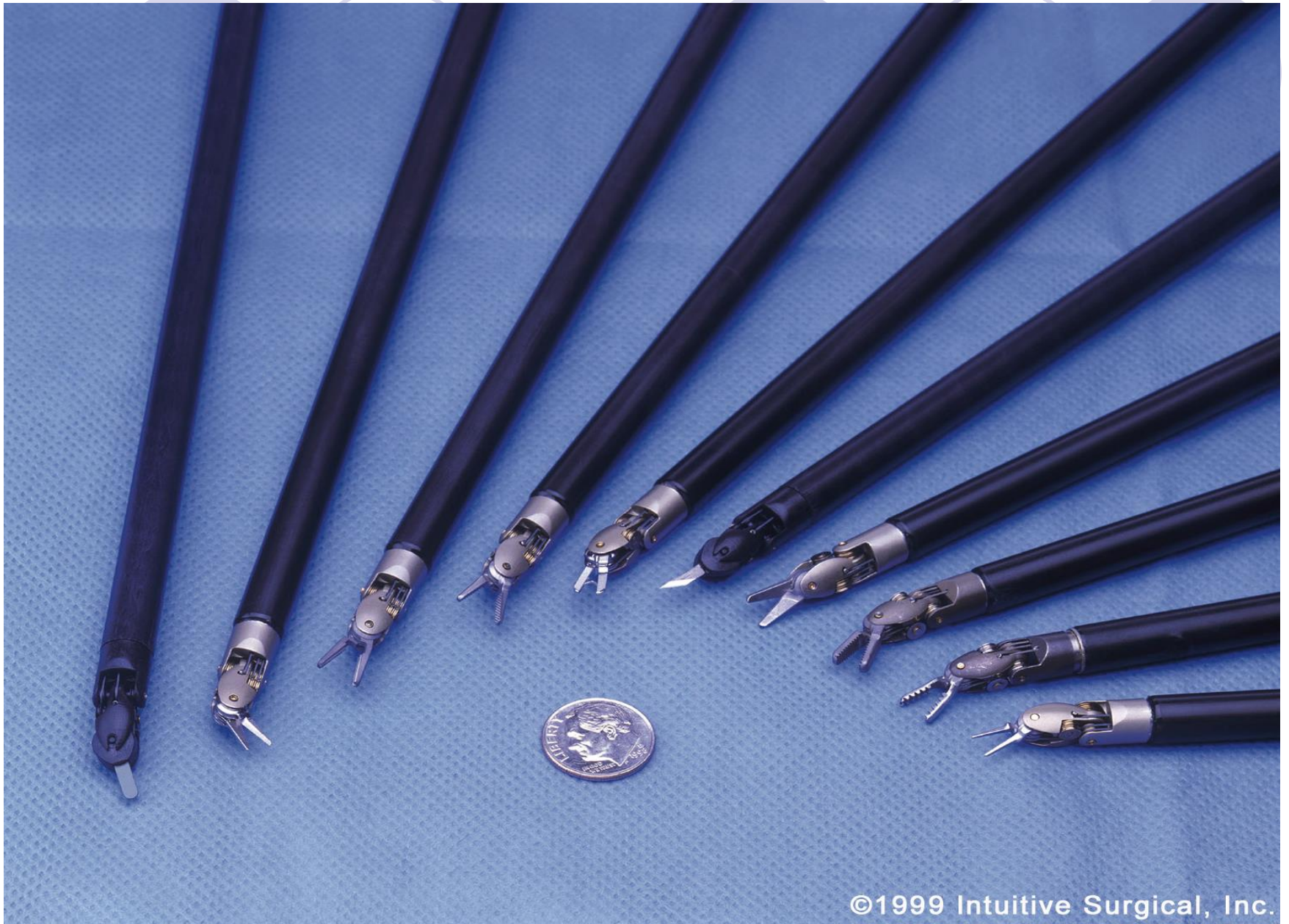
- Vision
 - 2D on a flat screen
- Dexterity
- long awkward instruments
- Counter Intuitive movements
- Ergonomics
- Long Learning curve





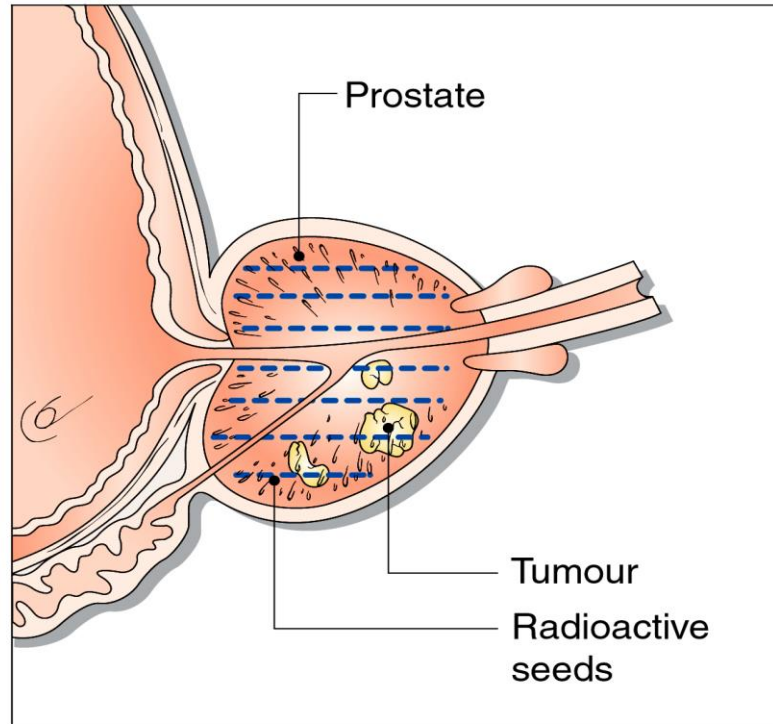
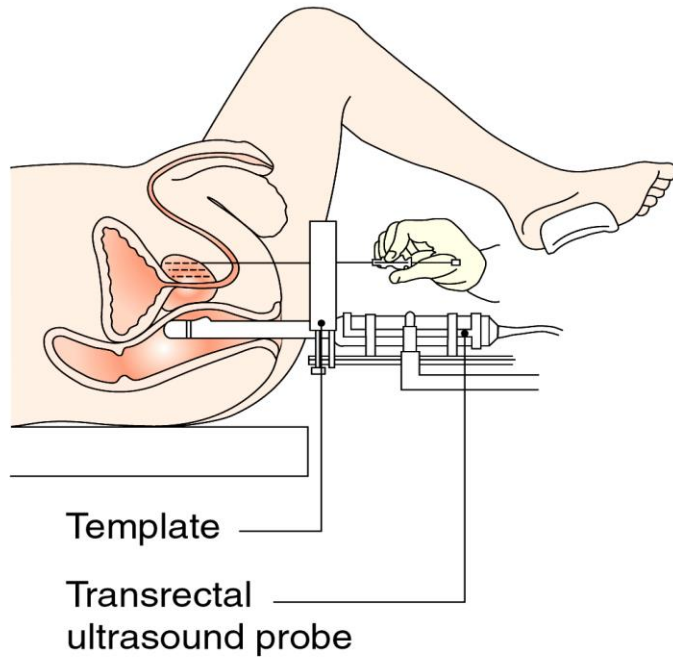
The
ROBOT!





©1999 Intuitive Surgical, Inc.

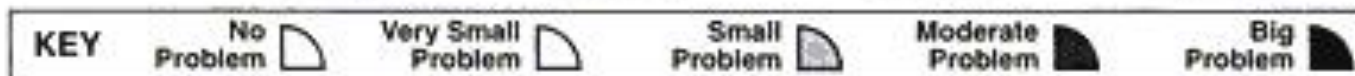
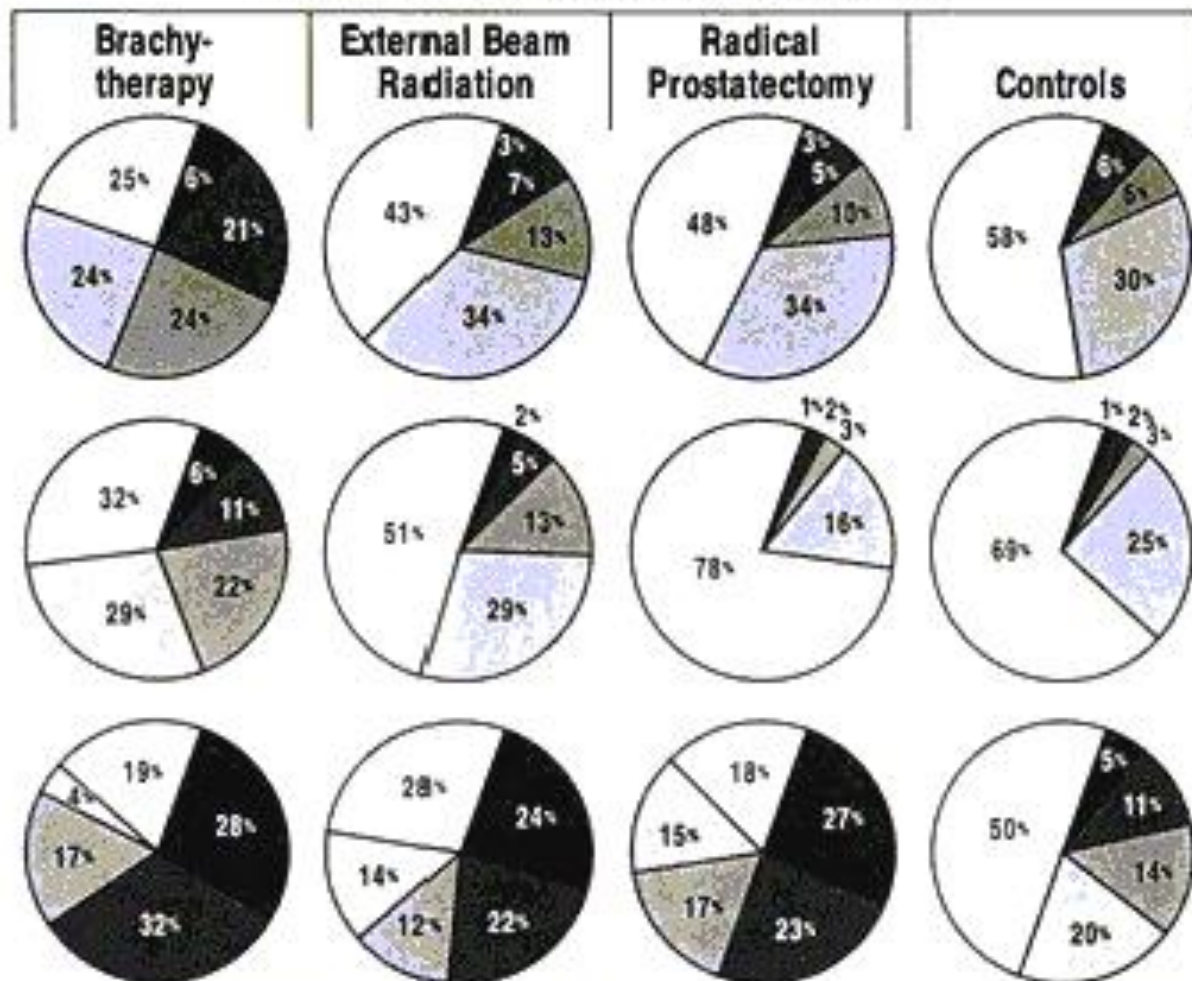
Brachytherapy



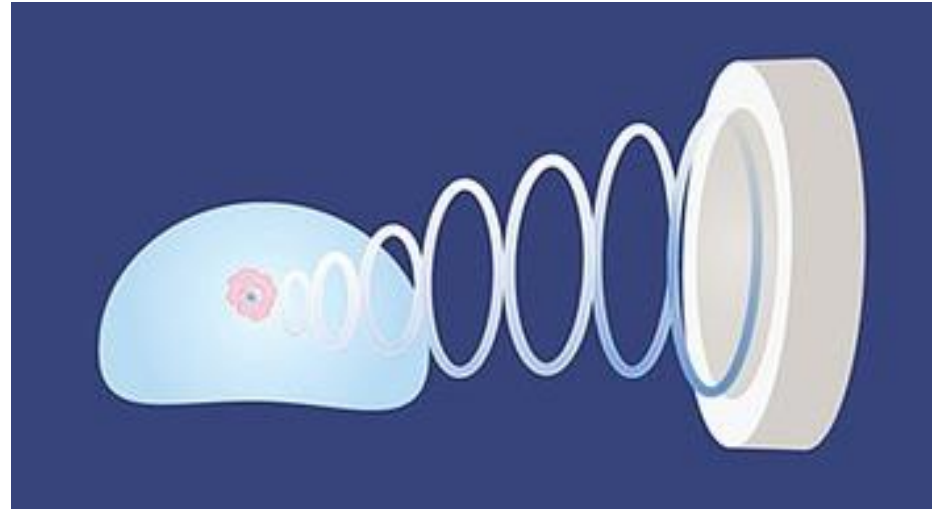
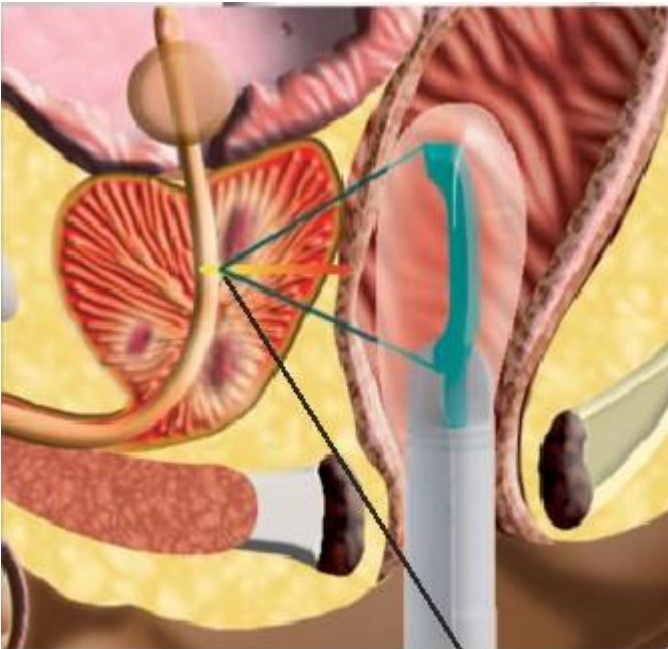
Prostate Cancer – Treatment

Response Distribution by Cohort

HRQOL Item

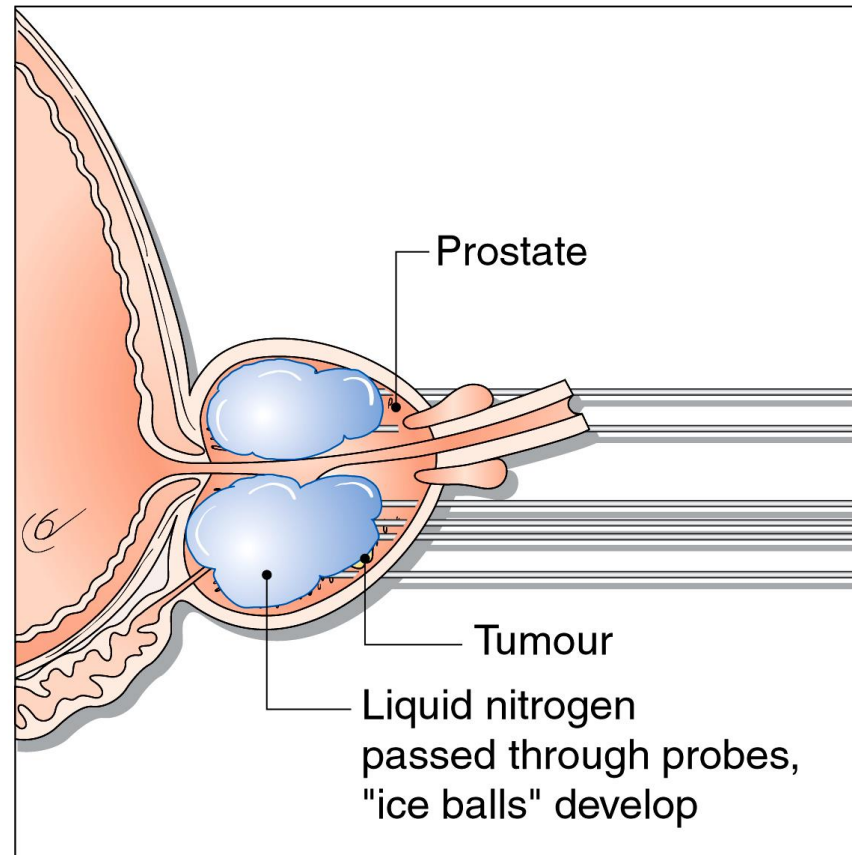
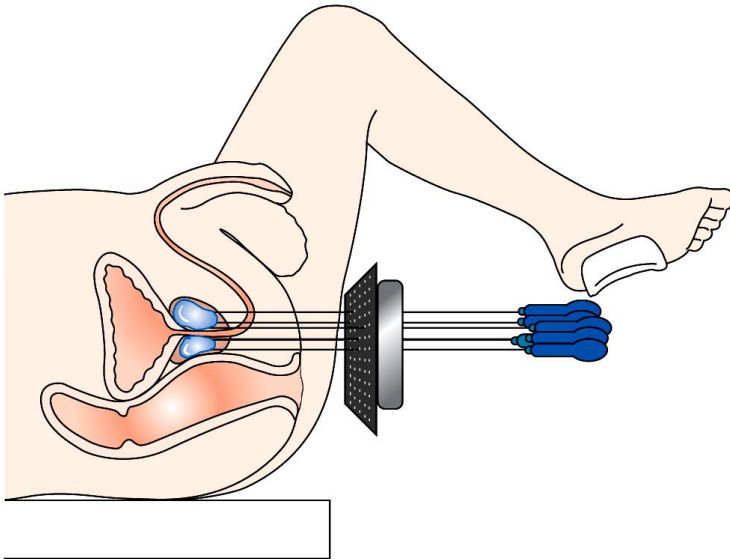
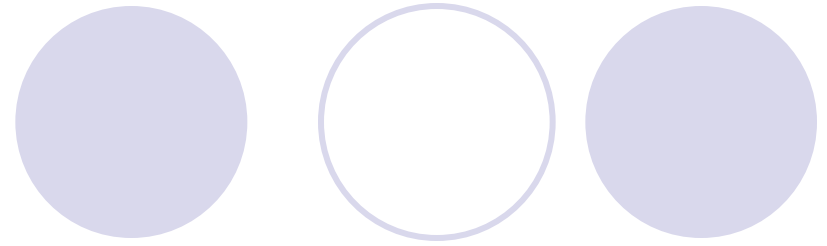


High Intensity Focused Ultrasound

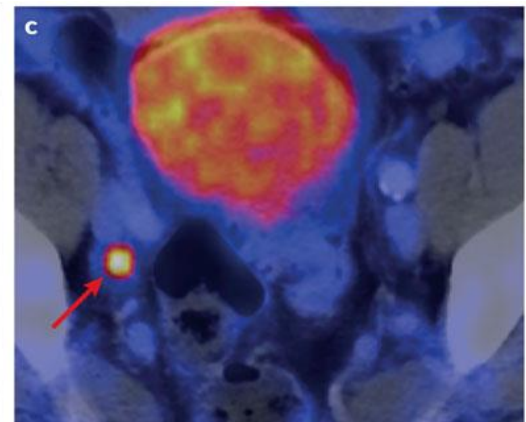
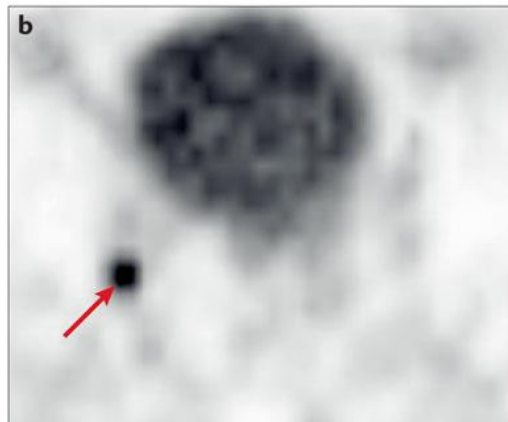
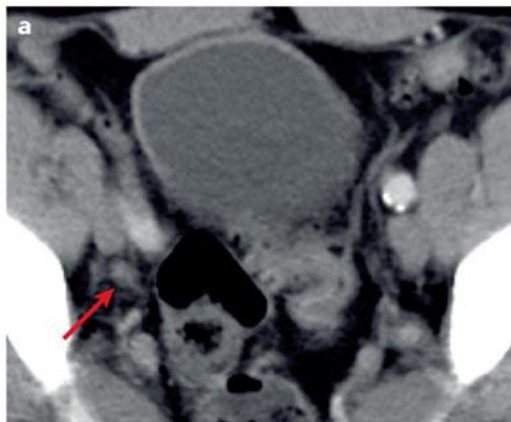
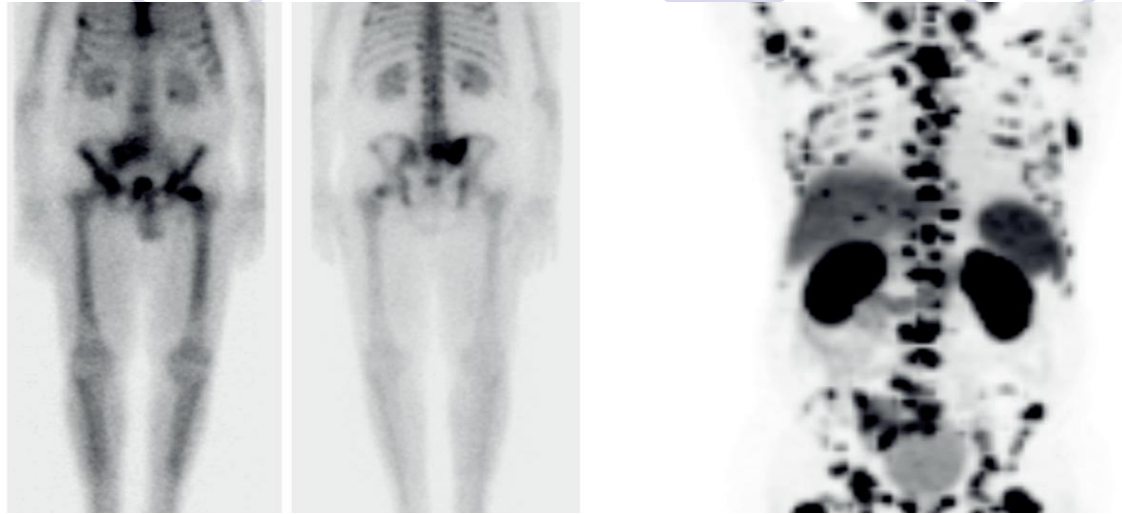


Low stage and grade
Not in multifocal disease
Longterm data awaited

Cryotherapy



Metastatic Prostate cancer



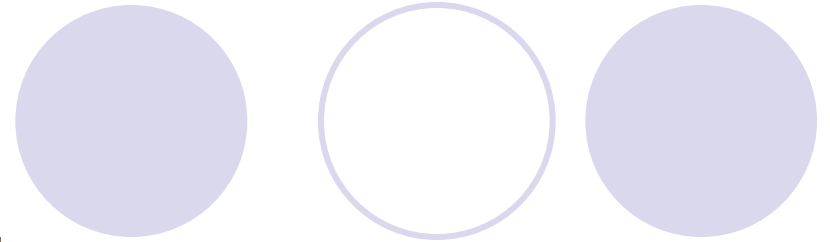
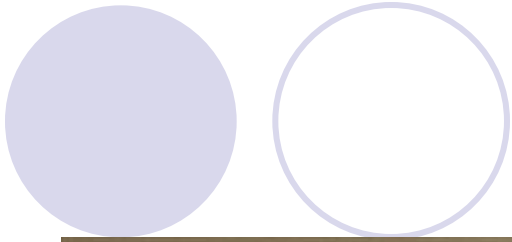
Treatment options: advanced prostate cancer



- Androgen ablation therapy - medical castration (LHRH analogue) or surgical castration (orchidectomy)
- Chemotherapy
- TURP for relief of symptoms
- Radiotherapy

1. Kirby RS, et al. Fast Facts: Prostate Cancer;1998:p47-51

2. British Association of Urological Surgeons, 2006. Guidelines for the Management of Metastatic Prostate Cancer. CD-ROM. London



Thank you