Case presentation
prostate
Mr. XYZ, a 62 year old male from Bangalore had come with,
- H/O urgency for micturition – 1 year.
- H/O Persistent nocturia – 4 months.
- No other comorbid conditions.
ON EXAMINATION:

A well built and well nourished man in his 7th decade

- No pallor, non icteric.
- No cyanosis, no clubbing.
- No Gen lymphadenopathy.
- No pedal edema.
• **P/A:** soft, non tender, no organomegaly.
• **Ext. genitalia:** Normal.
• **P/R:** (DRE)
  
  A nodule of about 1.5 cm diameter palpable on the posterior aspect of prostate. Rectal lumen was narrowed.
Routine blood and urine investigations

- Hb – 13.4 gm%
- Normal.
- PSA done on 31.10.2007. = 4.61 ng/dl.
Inference?

- Age adjusted PSA is abnormal.
- ?BPH
- ?Malignancy
• TRUS guided needle biopsy of the prostate: (22.12.07) performed with an 18G needle mounted on a spring loaded gun directed by ultrasound.
• MODERATELY DIFFERENTIATED ADENOCARCINOMA.
• Gleason’s score=3 +3= 6.
CT scan of pelvis(9.11.07)

- Both lateral lobes slightly enlarged measuring 3.2 X 4.5 cm.
- A single nodule of size 2.1 X 2.4 cm located posteriorly in subcapsular location.
- Seminal vesicle – Normal
- No nodes enlarged.
- STAGE T2cNoMo adenocarcinoma of prostate.
- PSA< 10
- Risk stratification.
NCCN guidelines

Intermediate risk: T2b/T2c or Gleason 7 or PSA 10-20ng/dl.

Radical prostatectomy+pelvic node dissection if predicted probability of lymph node metastasis is >= 7%
WHAT NEXT?

- Organ Confined Disease.
- surgery . . . ?
- RT . . . ?
NCCN guidelines

Intermediate risk: T2b/T2c or Gleason 7 or PSA 10-20ng/dl.

Radical prostatectomy+pelvic node dissection if predicted probability of lymph node metastasis is >= 7%
<table>
<thead>
<tr>
<th>PSA Range (ng/mL)</th>
<th>Pathologic Stage</th>
<th>2-4</th>
<th>5-6</th>
<th>3+4=7</th>
<th>4+3=7</th>
<th>8-10</th>
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<tbody>
<tr>
<td>0-2.5</td>
<td>Organ confined</td>
<td>86</td>
<td>73</td>
<td>51</td>
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<td>Seminal vesicle (+)</td>
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**KEY:** PSA = prostate-specific antigen.
• ROACH FORMULA = \( \frac{2}{3} \) of 4.61 + \{ (GS-6) \times 10 \}
  = 3.07\%
Patient underwent **RADICAL PROSTATECTOMY without lymph node dissection** on 06.01.08.

Post OP HPE:

- MODERATELY DIFFERENTIATED ADENOCARCINOMA/Gleason’s score=3 +3= 6.
- Tumour invading the capsule with **periprostatic fat involvement with perineural involvement**.
- seminal vesicles, apex and base of prostate free.
Bone scan(04.02.07)

- Normal study.
- No metastatic foci detected.
- PSA done on 04.03.07 = 0.3 ng/dl.
ADJUVANT TREATMENT?

- pT3aNxMo
- Adjuvant RT?
- Observe?
- Hormonal management?
NCCN guidelines

Intermediate risk: T2b/T2c or Gleason 7 or PSA 10-20ng/dl.

Radical prostatectomy+pelvic node dissection if predicted probability of lymph node metastasis is >= 7%
NCCN guidelines

If Radical prostatectomy + positive margins
- RT.
- Observe.

If Radical prostatectomy + Lymph Node Metastasis
- Androgen Deprivation therapy.
- Observe.
<table>
<thead>
<tr>
<th>Trial</th>
<th>No. of Patients</th>
<th>Treatment Randomization</th>
<th>FFBF With Adjuvant XRT (%)</th>
<th>FFBF With Surgery Alone (%)</th>
<th>P Value</th>
<th>DMFS With Adjuvant XRT (%)</th>
<th>DMFS With Surgery Alone (%)</th>
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<th>OS With Adjuvant XRT (%)</th>
<th>OS With Surgery Alone (%)</th>
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<tr>
<td>93.1</td>
<td>90.1</td>
<td>.68</td>
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<tr>
<th>OS</th>
<th>76.8</th>
<th>70.7</th>
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</table>
summary

- A man in his 7th decade of life in his best quartile of health.
- diagnosed clinically as organ confined prostate cancer/PSA<10 / GS=3+3=6.
- RADICAL PROSTATECTOMY with out PLND.
- Post OP HPE – pT3NxMo. (with ECE)
- Role of Adjuvant treatment?
- F/U – PSA + DRE.