Prostate Radiotherapy
Symptom Management

WHAT TO EXPECT & WHAT TO DO?

Margaret Hjorth
Nurse Unit Manager
Epworth Radiation Oncology
Overview

• 20,000 men/year diagnosed with prostate cancer.
• Radiotherapy
• Primary treatment or in combination – Surgery &/or Hormone Therapy.
• Impact on all aspects of a patient's life.
• What to expect and what to do.
Who is the Patient with Prostate Cancer

- Average age at diagnosis – 67.4 years
- Younger men
- Rural men
- Most married with adult children.
- Most had several co-morbidities but were generally well, independent and their co-morbidities well managed.
## Radiotherapy

<table>
<thead>
<tr>
<th>GROUP</th>
<th>CLINICAL STAGE</th>
<th>GLEASON SCORE</th>
<th>SERUM PSA</th>
<th>RADIOTHERAPY</th>
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</thead>
<tbody>
<tr>
<td>LOW RISK</td>
<td>T1c – 2a AND</td>
<td>&lt; 6 AND</td>
<td>&lt; 10mg/ml</td>
<td>EBRT (78Gy/39#) or LDR Brachytherapy (145Gy) or EBRT &amp; LDR boost (46Gy/23# + 110Gy)</td>
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<tr>
<td>INTERMEDIATE RISK</td>
<td>T2b OR</td>
<td>7 OR</td>
<td>10 – 20mg/ml</td>
<td>Hormones – 6 mths neoadjuvant-LHRH agonist + EBRT (78Gy/30#)</td>
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<tr>
<td>HIGH RISK</td>
<td>T2c – 4 OR</td>
<td>8 -10 OR</td>
<td>&gt; 20</td>
<td>Hormones LHRH agonist – 6 mths neoadjuvant &amp; further 2yrs adjuvant + EBRT (78Gy/39#)</td>
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<td>POST PROSTATECTOMY</td>
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<td>ADJUVANT + surgical margins</td>
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<td>EBRT</td>
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<tr>
<td>SALVAGE</td>
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<td>Rising PSA</td>
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<td>EBRT</td>
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<tr>
<td>METASTATIC PROSTATE</td>
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Radiotherapy

Today – advances in technology/science/techniques
The Patient (Domains of care)

- Physical needs
- Psychosocial needs
- Emotional needs
- Practical needs
- Sexual needs
Our Department

External Beam (EBRT)

Brachytherapy or ‘Internal’
Model of care

First day of treatment
• Nursing Initial Assessment & Education

Weekly nursing reviews
• Toxicity scores/CTCAE tool

Final day of treatment
• Late effects
• Resources – support groups/services
• Follow up
Initial Assessment

History
• Surgery/Biopsy
• PSA
• Hormone therapy

Baseline
• Weekly

Relationship
• Social situation
Information

Process/procedures
Who they will meet
Appointments
Points of contact
Site specific brochure
Multimedia
Education

What to expect & What to do

Basic RT 101 – how it works

• Daily treatment
• Non painful
• Non invasive
• Radiotherapy is a LOCAL treatment
• Local treatment = Local reactions
• Reaction is dependent on dose of radiation/site
• Temporary/Manageable
Education

Prior to commencement of treatment

- Potential side effects and symptoms.
- To report immediately the development of symptoms.
- The importance of adequate fluid intake to maintain hydration.
- Motion management – comfortable bladder/empty rectum.
- Self care measures.
Radiation Induced Side Effects

Why?
Radiation is not able to discriminate between normal and malignant cells

The Response of healthy cells depends on:
• The rate of cell proliferation
• Total dose
• Fractionation
• Concurrent therapies
• Patients general health, age and co-morbidities
# Prostate Radiotherapy Side Effects

**SHORT TERM (ACUTE)**
- Mild Skin reaction
- Fatigue
- Bladder and Bowel irritation
- Erectile Dysfunction

**LONG TERM (LATE)**
- 2-3% Proctitis
- 20-30% Impotence
- Incontinence: Rare
Skin Care

Promote cleanliness & comfort and prevent trauma

Principles of gentle cleansing
• Lukewarm water; gentle soap

Promote comfort
• Moisturise BD
• Avoid irritant products

Prevent trauma
• Avoid friction
• Protect from direct sunlight
Fatigue

May be:
• Pre-existing
• Disease related
• Concurrent; adjuvant therapies

Characterised by:
• Lack of energy
• Difficulty concentrating
• Emotional stress
• Low mood
• May effect overall QOL
Cumulative and self limiting

Assessment
• Effects on mood/ability to concentrate
• Sleep/rest/activity patterns
• Factors that increase or relieve fatigue
• Effects on daily living
• Meaning to the patient

Management
• Moderation
• Set priorities & goals
• Identify important activities
• Rest periods/Gentle exercise
• Balanced diet and adequate fluid intake
• Symptom reporting and treatment
Bladder irritation/Cystitis

30 - 40Gy

Incidence rate between 23-80%.

Dysuria
Increase in urinary frequency
Urinary urgency
Nocturia
Hesitancy
Bladder spasms
Haematuria
Assessment

Assess for:
- Frequency and amount
- Sense of incomplete voiding
- Poor urinary stream
- Intermittent flow
- Hesitancy
- Nocturia
- Medication history
- Physical exam

Questions/prompts:
- How often & how much?
- Do you feel you are emptying completely?
- Any problems starting or finishing?
- Any time of day it’s worse?
- How many times/night?
- Is the need to go to the toilet what wakes you?
Management

Flow & Stream – Retention (CTCAEv3.0)

Grade 0

• Nil intervention required

Grade 1 – hesitancy/dribbling

• Assess fluid intake & encourage adequate hydration
• Non steroidal anti-inflammatory (if not contraindicated)
  – Nurofen x 2 tabs TDS with food
Management

Flow & Stream

Grade 2 – assess emptying

• Bladder scan pre & post void
• Report to Radiation Oncologist (RO)

Grade 3 – obstructive symptoms

• Bladder scan pre & post void
• Check medication – prazosin/flomaxtra
• Refer immediately to RO – may require medication/IDC
Management
Frequency/Dysuria/Burning (CTCAEv3.0)

Grade 0
- Nil intervention required

Grade 1 - > 2 x normal
- Assess fluid intake & encourage adequate hydration
- FWT
Management

Frequency/Dysuria/Burning

**Grade 2**  →  2 x normal but < 1hrly
- Commence urinary alkaliser
  - URAL - 1 sachet BD increase to 1 sachet QID
- May be increased to 2 sachets QID
- FWT / MSU

**Grade 3**  >  hourly
- Report to RO
Management

Frequency – Nocturia

• Review baseline
• Adequate fluid intake
• Check why they are waking
• FWT/MSU
• URAL – 3-4 per day (4pm & 8pm)
• Coffee/alcohol intake at night
Incontinence (CTCAEv3)

Assess

• Occasional (Grade 1) / Spontaneous (Grade 2) / Interfering with ADL’s (Grade 3)
• Amount
• Duration
• Impact

Management

• Pelvic floor muscle training
• Disposable pads for men
• Resources – local continence clinic
Bowel Irritation

30 Gy

Diarrhoea
Proctitis
Tenesmus
Assessment

Assess for

- Changes in bowel habits
- Frequency/consistency
- Pain/cramping
- Urgency
- Anal irritation
- Blood/mucous

Questions/prompts

- How many times per day?
- Stools – Hard or soft?
- Taking aperients?
- Any issues with wind/fullness/pain?
- History of haemorrhoids?
- Taking anticoagulants?
Management

Diarrhoea (CTCAEv3.0)

Incidence rate 18-20%

Grade 0
• Nil intervention required

Grade 1 > 4 stools above baseline
• Oral rehydration
• Modify diet
Management

Diarrhoea

Grade 2 &gt; 4-6 stools above baseline
• + pharmacological measures
• Loperamide and Lomotil are the most commonly used agents and are prescribed as first line therapy.

Loperamide - non analgesic opioid
• 4mg onset of diarrhoea
• 2mg every 4hrs or after every unformed stool
• Until diarrhea free for 12 hrs
  (daily dose does not exceed 16mg)
Management

Diarrhoea

Lomotil - (Diphenoxylate and atropine)
opiate analogue

Grade 3 – severe
• Associated dehydration/fever
• Admission to hospital
• Break in treatment
Management

Proctitis (CTCAEv3.0)

Proctitis
• Diarrhea, abdominal cramping and tenesmus

Tenesmus
• Fecal urgency and frequency
• Needing to strain
• Pain in anus
• Fecal incontinence
• Rectal bleeding
Management

Proctitis

Grade 0

• Nil intervention required

Grade 1

> stool frequency, occasional blood streaked stools or rectal discomfort (including Haemorrhoids) not requiring medication

Grade 2

> stool frequency, bleeding, mucous discharge, rectal discomfort requiring medication; anal fissure
Management

Proctitis

Grade 1 & 2

• Bulking agents (Fybogel)
• Anti – diarrheal (Loperamide)
• Anti-spasmodic (Buscopan)
• Rectal corticosteroids creams/enemas
Management

Proctitis

Grade 3

>stool frequency/diarrhoea requiring parental support; rectal bleeding requiring transfusion; or persistent mucous discharge, necessitating pads

• Break in treatment
Erectile Dysfunction (ED)

- Inability to achieve or maintain an erection firm enough for sexual activity
- Damage to nerves and blood vessels required for strong erections
- Erections after treatment are not going to get better than they were before
Erectile Dysfunction (ED)

External Beam Radiation Therapy
40 - 80 % incidence
Not immediate – 6 months post treatment

Brachytherapy
Slow but increasing rate of ED following brachytherapy
50 % of patients notice erection problems at 3 years
Erectile Dysfunction

Relationship impacts

- Emotional toll of the cancer diagnosis
- ED add to pressure for patient and partner
- Embarrassment, frustration, anger can lead to depression, anxiety, withdrawal
- Expert management
Erectile Dysfunction

• Treatment options
• Resources - Cancer Council Booklet
• Contact details of local support services
• Psychosexual counselling phone service
• Pamphlets in booklet
Metastatic prostate Cancer

Palliative intent:

- Bone Pain
- Spinal cord compression
- Obstruction
- Bleeding
Potential side effects

Depend on site

• Pain flare
• Nausea
• Fatigue
• Diarrhoea
• Skin reaction
RADIOThERAPY NURSING CARE PLAN

ABDOMEN

DATE: 17/05/2013  SIG: M Blanchard RN
TREATMENT AREA: Hemibody T7 - Pelvis  RO: Pat Bowden
DOSE: 46 GY - 8 fractions at 2 fractions a week  FINISH DATE: 11/6/2013

Treatment Area:

Potential Side Effects:

| SKIN CARE | • Wash with warm water and a gentle unscented soap/cleanser  
| CAUTION: BD  
| • Apply moisturiser to area  
| • Avoid friction in treatment area  |

| NAUSEA/VOMITING | • Monitor & Report  
| • Anti-emetics regular & PRN  |

| PAIN | • Monitor  
| • Analgesia PRN  |

| FATIGUE | • Monitor and Report  |

| TX PRE-MED | • |

| DIARRHOEA | • Anti-Diarrhoeal PRN  |

| BLADDER IRRITATION/DYSURIA | • Encourage adequate fluid intake  
| • Ural QID  |
Treatment Schedules

• Quality of Life (QOL)

• Shorter Schedules
  • 8Gy:1#
  • 20Gy:5#’s
  • 30Gy/10#
  • Stereotactic
What to do

• Tea or coffee syndrome
• Drill down for full picture
• Individual/vulnerable
• Improve Quality of Life (QOL)
References

Cancer Council Victoria

www.cancervic.org.au

Prostate Foundation Australia