

# Role of the Specialist Brachytherapy Radiographer

The Kent Oncology Framework

Emma Bourke

Advanced Practitioner Brachytherapy



# Prostate Brachytherapy KOC

- Based at Maidstone Hospital
- Dedicated Brachytherapy Theatre
  - Based in Chemo Unit (Former Ward)
  - Radiation protected Theatre
  - HDR Control Area
  - 2 Patient Side Rooms
- Dedicated Brachytherapy Sessions
  - Prostate Implants Thursday AM
  - Prostate HDR (tbc – Likely Wednesday)



# The Prostate Brachytherapy Team

- Cross-Site Team
- 5 Consultants
  - 3 Oncology Consultants
  - 1 Urology Consultant Surgeon
  - 1 Radiology Consultant
- 4 Specialist Radiographers
  - 3 Urology Specialists
    - Across all RT
  - 1 Brachytherapy Specialist
    - Across all Brachy
- 5 Physics Staff
  - 1 dedicated
  - Other staff rotating/part-time



# The KOC Radiographer Journey

- 1 Trainee Urology Consultant Radiographer
- 2 Urology Specialist Radiographers
- 1 Brachytherapy Specialist Radiographer (0.5 WTE)



# The KOC Radiographer Journey

**2006**

- 1 Urology Specialist



- 2 Urology Specialists (1 as a rotating post between two radiographers)



- 2 Urology Specialists (1 full/1 Shared) + 1 Brachy Radiographer (0.5 WTE)



- 2 Urology Specialists (2 full time) + 1 Brachy Radiographer (0.5 WTE)



- 3 Urology Specialists (2 Full/1 Part time) + 1 Brachy Radiographer (0.5 WTE)



- 2 Urology Specialists (2 full time) + 1 Brachy Radiographer (0.5 WTE)



- 3 Urology Specialists (3 full time) + 1 Brachy Radiographer (0.5 WTE)

**2018**



# The KOC Radiographer Journey

- Competencies

- Prostate Implant Competencies

- Package Developed In-House
    - Progress overseen by senior member of team

- Ultrasound Competencies

- Package developed In House

- Developed with Radiology Consultant for Fiducial Marker Insertion and signed off by Radiology Consultant
    - Now signed off by senior member of team



# Specialist Radiographer Roles

- Patient seen by Clinical Oncologist first, and referred for Brachy via EAS
- Specialist Radiographer (SR) monitors new EAS list, manages patient dates, and getting results of procedures requested prior to implant
- Bookings made by SR for New Patient info, Volume Study, Implant and Pre Op Assessment (POA)
- Seen by a member of the team for an information session (running of the implant day, implant procedure, side effects, follow up procedure, radiation protection, etc)



# Specialist Radiographer Roles

- TRUS volume study performed by SR, documented by second SR and volume calculated and assessed relevant to previous documented volumes (TRUS/MRI) and implant feasibility.
- Consent
- Arrange Pre/Post-Op prescriptions
- Once seen at POA, SR follows up results; management of any further issues
- Pre-implant phone call 24hrs prior to implant





# Specialist Radiographer Roles

- Radiographer team lead theatre session
  - Opening theatre
  - Call patients down to unit
  - Check in with patients (ID, consent, bowel prep)
  - Prepare theatre ready for implant
  - Prepare implant equipment (Isolader, U/S, Stepper, Laptops)
  - Ensure all Brachytherapy team are available
  - Get paperwork completed (VTEs, etc)
  - Prepare theatre staff
  - Catheterisation of patient prior to implant
  - Positioning of patient



# Specialist Radiographer Roles

- During implant, we cross-check and open the pre-prepared seed packets
- Second check each needle, location of needle, number of seeds in needle, correct order of needles as they are implanted
- Use of Manual Isolader (Theragenics) to produce custom seed strands
- 'Calling' of the custom seed strands (orientation of seeds & spacers) for each custom needle
- Seed count tally



# Specialist Radiographer Roles

- Implant finished; cleaning & removal of equipment, patient back to bed/room
- Equipment prepared for sterilisation, arrange for theatre cleaning
- Patients monitored post implant, post op info given
- Discharge paperwork prepared
- Arrange for patient room monitoring in evening by Physics



# Specialist Radiographer Roles

## Additional Roles

- Always contactable during working hours for questions
- Perform 2 month post-op follow up call
- Long term follow up (pts referred back to our follow up by consultants)
- Liase with COs and CNSs cross site
- Post-op TWOCs
- Manage and arrange post-op interventions
- Management of all theatre related maintenance/opening for other departments
- Theatre stock inventory and ordering
- Liaising with Sterilisation department (current & new equipment)
- Clinical Audits
- Retrospective Aria data entry



# Specialist Radiographer Roles

## Additional Roles

- Student Radiographers
- Mentoring other Departments
- Urology Specialists; other External Beam roles
  - New patient information
  - Fiducial Insertion
  - Consent
  - PGD
  - On Treatment Review Clinics
  - Long Term telephone follow up
  - Work Instructions/Protocols
  - Urinary Catheter management



# Roles for the Future

- More Prostate Brachytherapy PGDs
- Brachytherapy Referrals direct to Consultant radiographer
- Consultant Rad acting as assist during Implant (computer / U/S)
- Urinary Flows (already in place in KCH)
- HDR Prostate Brachytherapy
- Room monitoring



# Any Questions?

Is there anything that your department has in place that would help us or that we should bring into our role?

