Role of the Specialist Brachytherapy Radiographer

The Kent Oncology Framework

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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 (Isoloader, 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 Isoloader (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?