# Administer sealed source brachytherapy to patients using after loading devices



#### **Overview**

This standard is concerned with the delivery of brachytherapy using afterloading techniques, according to a previously developed treatment plan. This may be given as part of a combined treatment, either before, or after external beam radiation.

Users of this standard will need to ensure that practice reflects up to date information and policies

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### Performance criteria

#### You must be able to:

- P1 identify the treatment plan is identified and check its compatibility with the patient to be treated according to local protocols
- P2 check and reinforce the patient's understanding of the information given to ensure their compliance during the treatment and document as appropriate
- P3 assess the patient's emotional and physical state prior to each treatment delivery and document as appropriate
- P4 seek advice from an appropriate team member where you have concerns about the patient's suitability for treatment
- P5 check and/or programme the after loading device, or sources, to confirm compliance with the plan
- P6 make a final critical evaluation of the environment and patient prior to the radiation dose delivery
- P7 re-check the positioning of the applicator and regularly monitor this using appropriate method to ensure effective delivery of the treatment
- P8 observe the patient, equipment and treatment room during the treatment to detect any untoward events which may affect treatment delivery
- P9 where possible compare the dose delivered with the original plan to determine the degree of compliance with the plan and take corrective action is according to local protocols
- P10 with the exception of permanent implants, remove sources and applicators from the patient on completion of the treatment and store them safely according to local guidelines
- P11 recognise the need for, and implement, emergency procedures according to local protocols
- P12 assess the patient's needs on completion of the procedure and offer support as
- P13 inform the patient of future appointments/procedures
- P14 accurately record the brachytherapy data throughout each phase of the procedure to provide a permanent record
- P15 review any deviations from the protocols and appropriate action taken
- P16 report any incidents, errors and accidents according to local and national protocols
- P17 ensure all relevant data is recorded, collated, checked for accuracy and reproducibility and then transferred according to local protocols
- P18 recognise where help/advice is required, and seek this from appropriate sources

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### Knowledge and understanding

You need to know and understand:

- K1 the following:
  - K1.1 local rules
  - K1.2 local protocols for data entry, utilisation, recording and transfer
  - K1.3 local protocols for radiation treatment delivered outside the radiotherapy department
  - K1.4 local protocols for verifying and validating treatment
  - K1.5 local protocols for informed consent
  - K1.6 local protocols for patient identification
- K2 the importance of recognising, and not working beyond, the limitations of your own knowledge and experience
- K3 relevant anatomy and pathology e.g. regional, cross-sectional and functional
- K4 signs of patient distress and anxiety
- K5 clinical signs and symptoms which require attention and intervention
- K6 signs and symptoms of the early, late and chronic side effects of radiotherapy
- K7 concurrent and malignant disease progression and the potential impact on anatomical and physiological systems
- K8 principles of radiotherapy
- K9 patient positioning and immobilisation in order to optimise reproducibility of treatment delivery
- K10 selection of appropriate treatment technique for optimum delivery
- K11 the functions of after loading devices and their use in intracavitary and interstitial radiation treatment
- K12 guidelines for operation of after loading devices and insertion of sealed sources
- K13 contra-indications to treatment
- K14 advantages, disadvantages, risks and benefits of radiotherapy
- K15 equipment capabilities and limitations
- K16 care of equipment
- K17 the roles and responsibilities of other team members
- K18 critical appraisal of the environment and planned brachytherapy treatment against relevant patient/planning information

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#### **Additional Information**

**External links** 

This standard links with the following dimension within the NHS Knowledge and Skills Framework (October 2004):

Dimension: HWB7 Interventions and treatment

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