SFHR5
Produce treatment parameters for individual standard brachytherapy patient treatment

Overview

This standard covers the production of treatment parameters, which may include isodose distributions, for individual patients with brachytherapy (sealed sources) using manual or remote afterloading.

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

SFHR5

Produce treatment parameters for individual standard brachytherapy patient treatment

Performance criteria

You must be able to:

P1 conform to agreed departmental protocols
P2 pre-plan brachytherapy treatments
P3 order sources as determined by pre-planning where appropriate
P4 work interactively with clinical oncologists to optimise the treatment plan
P5 consider the impact of geometric uncertainties and provide solutions to problems of identified inaccuracies
P6 ensure that sources are handled safely
P7 provide a treatment plan and data relevant to the type, grade and stage of tumour
P8 produce plans only for treatments at a level of complexity within your personal expertise
P9 seek advice and support where level of complexity required exceeds your personal level of competence
P10 identify anatomical points of interest for dose determinations
P11 provide a treatment plan and data to achieve the intended purpose of radiotherapy
P12 produce a treatment plan which is deliverable in both geometric and practical

SFHR5

Produce treatment parameters for individual standard brachytherapy patient treatment

Knowledge and understanding

You need to know and understand:

K1 relevant departmental protocols and policies and their application
K2 the importance of recognising a treatment which is outside of your own level of competence for planning
K3 where to obtain expert advice and support
K4 relevant gross and cross-sectional anatomy
K5 the geometric principles of brachytherapy planning
K6 brachytherapy dosimetry systems and their limitations
K7 the criteria for dose prescription for brachytherapy plans and maximum allowed dose to organs at risk dependent on disease site
K8 the minimum and optimum data required to enable production of a patient treatment plan
K9 the use of computerised treatment planning applications
K10 relevant principles of radiation physics including the consequences of self shielding by sources and radioactive decay
K11 the range and extent of independent checks required for different types of brachytherapy treatment plan
K12 verification methods and techniques and how to apply them
K13 systems for the optimisation of brachytherapy treatments
K14 the potential for error associated with the immediate nature of brachytherapy calculations and the consequences of geometric inaccuracies
K15 available sources and systems for specifying brachytherapy source strength

SFHR5
Produce treatment parameters for individual standard brachytherapy patient treatment

Additional Information

External links

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

Dimension: HWB7 Interventions and treatments

SFHR5

Produce treatment parameters for individual standard brachytherapy patient treatment

Developed by	Skills for Health
Version number	1
Date approved	June 2010
Indicative review date	June 2012
Validity	Current
Status	Original
Originating organisation	Skills for Health
Original URN	R5
Relevant occupations	Health, Public Services and Care; Medicine and Dentistry; Nursing and Subjects and Vocations Allied; Healthcare and Related Personal Services
Suite	Radiotherapy
Key words	radiotherapy, cancer