

Produce routine radiographic images of the breast

Overview

This standard is about the preparation and positioning of individuals and the application of compression for radiographic imaging of the breasts. The standard also covers the preparation of the radiographic equipment and performance checks for routine breast imaging, and for initiating the correct exposure. Routine radiographic images of the breast are medio-lateral oblique and craniocaudal mammograms. These are taken as part of a regular screening programme or diagnostic procedures. This standard includes the production of diagnostic mammograms through the accurate positioning of the individual, the use of radiographic equipment, safe delivery of radiation and the restoration of the equipment to its standby state. Key people are those involved in the individual's care and others involved in provision of services. Imaging of individuals with augmented breasts is excluded from this standard. Users of this standard will need to ensure that practice reflects up to date information and policies.

Produce routine radiographic images of the breast

Performance criteria

You must be able to:

1. clean the mammography machine with suitable cleansing agents prior to use and after each examination
2. check the mammography machine for safety and optimal performance before use
3. check the image handling and identification devices for safety and optimal performance before use
4. carry out all additional equipment checks according to national standards and local protocols
5. report faults promptly to the appropriate person(s) and document appropriately
6. view previous records and mammograms relating to the individual where available, and use the information obtained to guide and make adjustments to the imaging procedure
7. ensure the environment is conducive to maintaining the privacy and dignity of the individual
8. check the identification details before commencing the procedure in accordance with local policies and procedures
9. introduce yourself and other members of staff present during the examination
10. communicate with the individual / key people to facilitate their understanding of and co-operation with the examination
11. establish the individual's capacity to understand the procedure with the help of key people if necessary
12. obtain valid consent for the procedure in accordance with national and local guidelines
13. explain the procedure in a manner which encourages the individual to relax and co-operate with the requirements of the procedure
14. respect the individual's privacy, dignity, beliefs and decisions
15. obtain and record all the information relevant to the procedure, and act upon it where necessary according to local protocols
16. assess the individual's emotional needs and respond appropriately
17. ask the individual to undress for the procedure
18. assess the individual's body habitus and mobility to inform the potential adaptation of technique and the equipment to be selected
19. observe and record any obvious external abnormalities of the

Produce routine radiographic images of the breast

breasts

20. position the individual for the procedure with the minimum of discomfort and to achieve optimal images
21. ensure compliance with the procedure is confirmed and take the appropriate action if consent is withdrawn at any time
22. adjust the angulation of the tube to ensure maximum coverage of breast tissue
23. select the appropriate exposure factors if required
24. select and record which breast is being imaged together with any additional legends required by local protocols
25. make sure that the individual's breast is properly positioned and compressed to ensure the whole breast is included and no potential artefacts are present
26. determine the number of images required to optimise breast coverage
27. use all available information to make appropriate exposures in compliance with current legislation governing the use of ionising radiation
28. advise the individual of the reporting procedure and give any necessary additional information
29. answer any questions, or refer to others if they are outside your scope of competence
30. correctly and permanently label the images with the individual's identification before processing or storage
31. check the images for diagnostic quality and repeat the images if necessary
32. recognise where help or advice is required and obtain this from appropriate sources

Produce routine radiographic images of the breast

Knowledge and understanding

You need to know and understand:

1. legal, organisational and policy requirements relevant to your role, the role of others in your organisation and the activities being carried out
2. the relevant national and local standards, guidelines, policies and procedures that are available and how and when they should be accessed
3. the importance of respecting individuals' culture, privacy, dignity, wishes, beliefs and decisions
4. the limitations of your own knowledge and experience and the importance of operating within your scope of practice
5. the roles and responsibilities of other team members
6. the importance of obtaining valid consent in line with national and local guidelines
7. the purpose of the breast diagnostic and screening services
8. the quality assurance programmes in symptomatic, assessment and breast screening services
9. the importance and implications of correct individual identification
10. the changes in images, physical appearance or feel of breast tissue as a result of age, surgery, hormonal state, medication or radiotherapy
11. the anatomy, physiology and pathology of the breast, axilla, subcutaneous tissues and associated structures
12. the signs and symptoms of breast disease including cancer
13. radiation physics and x-ray imaging
14. the need to optimise the radiation dosage received by the individual
15. the risks of work-related disorders and how to minimise the risks
16. that the responsibility for confirming equipment is in good working order rests with the user
17. the functions, specifications and performance characteristics of mammography machines and picture archiving and communication systems (PACs)
18. where and how to access previous records and images and how to add further information
19. the importance of reporting faults and malfunctions promptly and the correct procedures for reporting these
20. the importance and implications of selecting the correct imaging

Produce routine radiographic images of the breast

view

21. what creates artefacts on images and the importance of avoiding their presence
22. how to adapt communication styles, ask questions, and listen carefully in ways which are appropriate for the needs of the individual
23. methods of communicating difficult and complex information to individuals and key people
24. the importance of providing individuals and key people with opportunities to ask questions and increase their understanding
25. the information that should be given to individuals before, during and on completion of the examination
26. the need for the individual's compliance throughout the procedure and the factors which might influence that compliance
27. the various ways in which distress and discomfort may be presented and the strategies for handling these
28. the factors which influence the exposure setting
29. the result reporting procedures and the importance of giving timely and accurate information to the individual
30. importance of good infection control processes and how to apply them
31. the local procedures for checking mammography equipment and picture archiving and communication systems (PACs) and the importance of undertaking these on a regular basis
32. radiographic techniques and standards for the production of the optimum diagnostic mammogram
33. techniques to optimise positioning of the breast to overcome physical constraints
34. the importance of using accurate labelling according to local protocols
35. how images should be correctly displayed
36. procedures relating to recording, collating and preparing appropriate information, documentation and images for transfer or storage according to local protocols
37. how to keep full, accurate and clear records in line with organisational procedures

Produce routine radiographic images of the breast

External Links

This standard links with the following dimension within the NHS Knowledge and Skills Framework (October 2004):
Dimension: HWB6 Assessment and treatment planning

Produce routine radiographic images of the breast

Developed by Skills for Health

Version Number 2

Date Approved February 2019

Indicative Review Date February 2024

Validity Current

Status Original

Originating Organisation Skills for Health

Original URN SFHM2

Relevant Occupations Health Professionals; Health Associate Professionals

Suite Breast Screening and Assessment

Keywords radiography; mammography; mammogram; clinical; imaging
