

CHS195 Undertake ultrasound guided interventional procedures

OVERVIEW

This standard is about undertaking ultrasound guided interventional procedures. It covers the use of ultrasound equipment to guide interventional procedures such as biopsy sampling, fluid aspiration, fluid injection/infusion/instillation, oocyte collection, embryo transfer and fetal therapy. Users of this standard will need to ensure that practice reflects up to date information and policies. Version No 1

KNOWLEDGE AND UNDERSTANDING

You will need to know and understand:

1. The current European and national legislation, national guidelines and local policies and protocols which affect your work practice, including:
 1. health and safety at work
 2. safe working methods
 3. use of medical devices and product liability
 4. consent to interventional procedures
 5. patient identification
 6. data entry, utilisation, recording and transfer
2. The effects of different cultures and religions on care management
3. The importance of respecting individuals' privacy, dignity, wishes and beliefs and how to do so
4. The information that should be given to individuals:
 1. before commencing the interventional procedure
 2. during the interventional procedure
 3. on completion of the interventional procedure
5. The principles of ultrasound and its role in your area of practice
6. The range of options available following ultrasound examination and the role and importance of additional and complementary imaging techniques
7. The national and local guidelines for acceptance of requests for ultrasound guided interventional procedures in your area of practice
8. The contraindications associated with each investigation and the implications of proceeding with due consideration of related risks
9. The interpretation of relevant images and information to confirm the location of the region/structure(s) under investigation
10. The anatomy, physiology and pathology of the anatomical structures under

investigation

- 11.The pathophysiology of relevant disease processes
- 12.The clinical findings associated with normal and abnormal anatomical structures including benign and malignant tissue and the effects of treatment and age
- 13.The safe use of local anaesthesia
- 14.National and local guidelines and protocols for ultrasound guided interventional procedures in your area of practice, including procedures to minimise risks to any fetus if appropriate
- 15.The strengths, weaknesses and limitations of ultrasound in your area of practice
- 16.Safe operation of ultrasound equipment
- 17.The risks of work-related disorders and how to minimise the risks
- 18.Machine settings and methods available to optimise the ultrasound image
- 19.Image capture and recording devices
- 20.The preparation of the environment and equipment for ultrasound guided interventional procedures in your area of practice
- 21.Legislation and policies for standard precautions for infection prevention and control
- 22.Aseptic techniques and the potential consequences of poor practice
- 23.The importance of minimising any unnecessary discomfort of individuals undergoing interventional procedures, and how to do so
- 24.Local procedures for image acquisition, storage and retrieval
- 25.How to adapt communication styles in ways which are appropriate to different people (e.g. culture, language or special needs)
- 26.How to ask questions, listen carefully and summarise feedback
- 27.Methods of communicating sensitive/stressful information to individuals
- 28.The importance of providing individuals with opportunities to ask questions and increase their understanding
- 29.Effective clinical report writing
- 30.The importance of effective communication within the multidisciplinary team and with patients
- 31.The roles and responsibilities of other members of the multi-disciplinary team
- 32.The importance of recognising and respecting the knowledge and experience of other professionals
- 33.The importance of not operating outside the limits of your own knowledge and experience and the consequences of doing so
- 34.How imaging findings influence decisions by others e.g. surgeons, pathologists, oncologists, etc

PERFORMANCE CRITERIA

You must be able to do the following:

- 1.check the identification details before commencing the interventional procedure and enter them into the ultrasound machine having confirmed their accuracy
- 2.establish the individual's ability to understand the procedure with the help of a carer or interpreter if necessary
- 3.assess relevant images and information prior to performing the procedure to confirm the location of the region/structure(s) of interest

- 4.review the clinical history for factors which might contraindicate the procedure
- 5.clearly explain the procedure and possible outcomes, including risk, benefits and limitations
- 6.make an assessment of the individual's emotional state and respond appropriately
- 7.obtain valid consent for the procedure in accordance with national and local guidelines and protocols
- 8.ensure the environment is conducive to maintaining the privacy and dignity of the individual
- 9.ensure the individual is in an appropriate and comfortable position for the procedure
- 10.take appropriate steps to minimise the risk of work-related disorders
- 11.apply standard precautions for infection prevention and control and other appropriate health and safety measures
- 12.take appropriate precautions to ensure a clean or aseptic technique as required
- 13.select the correct equipment for the procedure according to national and local guidelines and protocols
- 14.check and prepare the equipment required for the procedure
- 15.administer local anaesthetic if required according to national and local guidelines
- 16.carry out the interventional procedure according to national and local guidelines
- 17.ensure the procedure is carried out under direct ultrasound control with continuous visualisation
- 18.where required by the procedure, obtain fluid/tissue samples and label containers according to local guidelines and protocols
- 19.capture representative images in accordance with national and local guidelines and protocols
- 20.protect the site on completion of the procedure
- 21.carry out immediate post-procedure observations according to national and local guidelines and protocols
- 22.respond appropriately and promptly to any deviation from normal clinical parameters, deterioration in an individual's condition or emergency situations in line with relevant national and local guidelines and protocols
- 23.provide the individual with information relating to the procedure and aftercare, and explain the process for giving results
- 24.document the procedure according to national and local guidelines and protocols and make arrangements for results review
- 25.communicate information and images to other members of the team as necessary

ADDITIONAL INFORMATION

This National Occupational Standard was developed by Skills for Health. This standard links with the following dimension within the NHS Knowledge and Skills Framework (October 2004): Dimension: HWB7 Interventions and treatments. This standard has replaced HCS_GI9