

#### **GUIDELINES FOR LIVE DEMONSTRATIONS OF PATIENT SCANS TO AN AUDIENCE**

### **Scope and Purpose**

The following guidelines describe a protocol for the demonstration of live patient scanning to an audience. They are designed to provide the educational benefits of a live, interactive demonstration while protecting patients from stress, unreasonable risks and breach of confidentiality.

The protocol is suitable for demonstrating scanning techniques for a range of pathologies and may include the administration of contrast agents. However, it should be noted that live scanning of obstetric patients and eyes are not permitted at any BMUS meeting.

Live scanning at a BMUS meeting must be performed in accordance with the BMUS Guidelines for the Safe Use of Diagnostic Ultrasound Equipment, as given at here.

# **Scanning Arrangements**

It is recommended that the patient is scanned in a suitable small room by a trained sonologist with a chaperone. The audience observes the demonstration in a separate viewing room via an audio-visual link. The sonologist has 2-way communications with the audience via an earpiece and microphone and the audience can see the live ultrasound images. The patient can hear only the sonologist.

## **Scanning Steps**

## **Preliminary Steps**

Prior to making any approach to patients, the organiser should obtain written approval from the Medical Director of the Trust to seek patients' permission to be scanned as part of an educational meeting. Approval from the local Ethics Committee may also be sought.

#### **Patient Selection**

It is recommended that each patient is recruited in two stages. Wherever possible, the patient should speak to the same individual to avoid confusion.

## **INITIAL MEETING**

- The initial contact is likely to be during an ultrasound list.
- Patients should be approached in a sensitive manner.
- For most cases, the first approach should be made 4 6 weeks before the planned demonstration. Patients with more stable or chronic conditions may be seen earlier.
- Only patients who are likely to know their diagnosis should be considered. If in doubt, the
  patient's suitability should be discussed first with the referring clinician, who may also offer
  to make the initial approach.
- It may be necessary to ask colleagues to help recruit sufficient suitable patients.
- It is advisable to avoid using patients, who may have difficulty attending due to poor mobility or travelling difficulties, and those who have a history of poor attendance.
- Contact details should be exchanged with the selected patients to follow up their potential participation.
- Selected patients should be given a letter of invitation to participate and full details of their
  involvement including the purpose of the demonstration, the nature of the procedure, the
  need for a second meeting and scan, the procedure on the day and a clear statement that

their decision on whether or not to participate will not affect their care. A standard leaflet giving information for adult patients having an ultrasound scan would be useful.

## **SECOND MEETING**

The purpose of the second meeting is to confirm that the patient is still suitable and consents to be scanned at the demonstration, having had time to consider the information given at the first meeting.

Written consent should be obtained and in obtaining it you should ensure that the patient is aware of the following:

- The purpose of the workshop and how delegates will benefit from seeing live scanning;
- why they have been chosen to participate;
- who will be present in the scanning room and where the audience will be;
- what the audience will see and hear through the audio-visual link;
- what the patient will see and hear and its significance;
- that they are under no obligation to help and that they can withdraw at any time without detriment to their future care;
- the scanning procedure and any associated risks

If the patient consents to the procedure, they should be re-scanned to confirm that appearances are unchanged.

Hand the patient a letter thanking them for their help and giving details of any special preparation (e.g. fasting). Include instructions on where and when they should report on the conference day. Ask that they bring the letter with them on the day. A map showing the venue is useful. Make it clear they can be accompanied by a spouse or friend.

Arrange to telephone the patient at a specific time two days before the meeting as a reminder.

# ON THE DAY OF THE MEETING

- Try to meet all patients before or after their scan if other commitments allow.
- Ensure that someone is responsible for managing the demonstration programme actively to control waiting times and give effective communications.
- Provide a private changing area for patients.
- Where ultrasound contrast agents are to be used, it is important that the procedure is supervised by an experienced ultrasonologist, who assumes responsibility for the safe, appropriate and ethical use of the agent. As with any injectable drug, there is a small possibility of adverse effects and it is the responsibility of the supervising ultrasonologist to ensure that this can be managed appropriately. In particular the injection should be administered in a clinical area, where resuscitation equipment and support is available. Current BMUS, EFSUMB and WFUMB safety guidelines related to use of ultrasound contrast agents should be followed. As there is evidence that microbubbles can potentiate bioeffects related to acoustic cavitation, special care should be taken to minimise the duration of scanning at higher acoustic output settings.

### AFTER THE DEMONSTRATION

Write to all patients thanking them for their contribution. Travelling expenses should be paid.