European Committee of Medical Ultrasound Safety (ECMUS)

Statement on the Use of Diagnostic Ultrasound for Producing Souvenir Images or Recordings in Pregnancy.

Developments in real-time three dimensional ultrasonic imaging have led to parents asking for souvenir (keepsake) video recordings of the fetus, sometimes at several stages during the pregnancy. An area of concern is the growth of services designed to provide such images and recordings without any diagnostic element to the scan. Often, such services are unable to provide counselling or offer guidance if signs of a fetal abnormality are unexpectedly revealed. Apart from such services, there many instances of diagnostic scans being prolonged in order to provide such recordings.

Very little information is currently available regarding possible subtle biological effects of diagnostic levels of ultrasound on the developing human embryo or fetus, and the possibility of developmental effects in the brain cannot be ruled out. There is evidence that diagnostic levels of ultrasound can influence development of the brain in small animals, although it is not possible to extrapolate this finding to the human situation. A balance must always be maintained between diagnostic benefit and risk to the patient. Therefore, it is difficult to justify souvenir or keepsake scanning that has no diagnostic benefit.

Recommendations:

1 Ultrasound scans should not be performed solely for producing souvenir images or recordings of a fetus or embryo.

2 The production of souvenir images or recordings for the parents to keep is reasonable if they are produced during a diagnostic scan, provided that this does not require the ultrasound exposure to be greater in time or magnitude (as indicated by the displayed MI and TI) than that necessary to produce the required diagnostic information.

3 Attention is drawn to the recommendation of the EFSUMB Clinical Safety Statement for Diagnostic Ultrasound that ultrasound examinations should be performed only by competent personnel who are trained and updated in ultrasound safety matters.