

ISUOG statement on the non-medical use of ultrasound, 2009

Bioeffects and Safety Committee (J. ABRAMOWICZ, C. BREZINKA, K. SALVESEN and G. TER HAAR) on behalf of the Board of the International Society of Ultrasound in Obstetrics and Gynecology (ISUOG)

Statement

ISUOG disapproves of the use of ultrasound for the sole purpose of providing souvenir images of the fetus. There have been no reported incidents of human fetal harm in over 40 years of extensive use of medically indicated and supervised diagnostic ultrasound. Nevertheless, ultrasound involves exposure to a form of energy, so there is the potential to initiate biological effects. Some of these effects might, under certain circumstances, be detrimental to the developing fetus. Therefore, the uncontrolled use of ultrasound without medical benefit should be avoided.

Comment

This statement was the result of a collaborative project between ISUOG and the World Federation for Ultrasound in Medicine and Biology (WFUMB), commencing at a joint safety symposium at the ISUOG 2007 World Congress in Florence, which is summarized in the following article. A similar statement (WFUMB Policy statement on non-medical use of ultrasound) was approved by WFUMB Council in June 2008.

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The safe use of non-medical ultrasound

A summary of the proceedings of the joint safety symposium of ISUOG and WFUMB

Diagnostic ultrasound might arguably be described as one of the most important technologies introduced into medicine in general, and into obstetric practice in particular, over the last 50 years. However, a 'fashion' appeared a few years ago that makes use of this technology without a medical indication and risks trivialization of a mature medical procedure: entertainment or keepsake ultrasound. The practice consists of private entities which, in return for a fee, offer glamorized ultrasound souvenirs, particularly three-dimensional (3D)/4D scans, to expectant mothers. These sessions are described as 'non-medical' by the protagonists, but, unfortunately, the 'customers' often assume they have undergone a medical scan and may therefore forfeit a regular, scheduled medical scan. This practice has given rise to virulent arguments centered on the risks and benefits of non-medically indicated procedures versus individual rights^{1,2}. The issue was widely discussed in the press after a well-known Hollywood actor bought a machine to examine his pregnant wife³.

The International Society of Ultrasound in Obstetrics and Gynecology (ISUOG) and the World Federation for Ultrasound in Medicine and Biology (WFUMB)⁴ held a workshop on the use of ultrasound for non-medical

purposes within the scientific program of the 17th ISUOG Congress, held in Florence, Italy in October 2007. The program sessions were co-chaired by the authors of this article, Drs J. S. Abramowicz and S. B. Barnett, the Chairs of the ISUOG Safety Committee and the WFUMB Safety Committee, respectively. Participants were internationally renowned scientists, clinical end-users and government regulators who were chosen for their expertise in acoustic physics, interactions of ultrasound with biological tissue and clinical knowledge, and the session included input from many organizations besides ISUOG and WFUMB, including the American Institute of Ultrasound in Medicine (AIUM), the Australasian Society of Ultrasound in Medicine (ASUM), the European Federation of Societies of Ultrasound in Medicine and Biology (EFSUMB), the European Committee for Medical Ultrasound Safety (ECMUS), the British Medical Ultrasound Society (BMUS) and the US Food and Drug Administration (FDA) Center for Devices and Radiological Health.

The AIUM has already taken a strong position against the practice of the so-called 'shopping mall entertainment ultrasound' phenomenon in the USA⁵, with support from the FDA Center for Devices and Radiological Health⁶. The American College of Obstetricians and Gynecologists