

Editorial

nally described by several groups, was used to eliminate the anxiety of the clinician if he/she missed a malformation. Unfortunately, this holds no truth.

When the first draft of the current American Institute of Ultrasound in Medicine (AIUM) guidelines was initiated, both the standard for obstetrical ultrasound examination and the controversy were born. By working as a multidisciplinary group, the final document was adopted by the Board of Governors of AIUM. As of today, no reference is made to the level of examination. From the earliest meetings, radiologic members of the AIUM encouraged the American College of Radiology (ACR) to develop similar guidelines, which were ultimately incorporated into one set of guidelines. Although the guidelines regarding the components of a basic obstetrical scan have been embraced by AIUM and ACR, they as yet have not been embraced by the American College of Obstetricians and Gynecologists (ACOG). Interestingly, the components of a fetal survey,

similar to those stated in the ACR/AIUM guidelines, appear in an ACOG technical bulletin, but the material in this later document is not officially endorsed by ACOG.

Uniform approval by all three bodies would be ideal, but is in no way mandatory. Hopefully, ACOG will realize the necessity of stimulating an approach to the fetal survey and ISUOG will adopt in total the components of a fetal survey.

It seems fair to say that ISUOG should be able to play an increasing role in the international interdisciplinary arena to establish uniform standards and guidelines which all disciplines can utilize. Hopefully, the terms describing levels will be abolished and not deemed acceptable for any publication. It seems reasonable to urge our colleagues to discourage any reference to level in both oral and written expressions. Our goal is to have a clearer understanding of what the writer or speaker is saying.

Opinion

Fetal karyotyping: which technique at what gestation?

Smidt-Jensen, Permin and Philip are reporting the results of a well-conducted randomized study of an impressive number of patients, comparing three techniques of tissue sampling for fetal karyotyping in low-risk groups. They have demonstrated that in their hands first-trimester transabdominal chorionic villus sampling (CVS) is safer than transcervical CVS and is not significantly different to amniocentesis at 16 weeks. At least in part, these results are not surprising since the authors pioneered transabdominal CVS and gained considerable expertise in this technique before undertaking their comparison to the newer, for them, transcervical CVS. I also believe that, in the long term, transabdominal CVS will be the method of choice because, in contrast to transcervical CVS, it can be learned more easily, since it is similar to amniocentesis, and it has a wider gestational window during which it can be carried out.

However, at present the real issue for fetal karyotyping is whether screening for chromosomal defects should be based on maternal age alone. Such a policy will identify at most 25–30% of the affected fetuses and, at least in Britain, the live birth incidence of Down syndrome has not changed significantly over the last 20 years.

In the last 2–3 years, the promising reports on the association between chromosomal defects and altered maternal biochemistry at 16 weeks, or the presence of ultrasonographically detectable markers at 16–20 weeks have provided increasing support for incorporating these tests in any sensible screening program in the future. Unless maternal blood factors and ultrasound markers are identified in the first trimester, the issue of comparing first-trimester CVS with second-trimester amniocentesis may become irrelevant.

The filtration technique for amniocentesis described by Sundberg, Smidt-Jensen and Philip may well improve the feasibility and safety of first-trimester amniocentesis. What is urgently required is a prospective randomized study comparing transabdominal CVS with amniocentesis at all gestations, and the comparison should address the issues of diagnostic accuracy, cost, and speed of providing results as well as short- and long-term safety. It may even be that such a study will demonstrate that at 10 weeks' gestation amniocentesis is better but at 20 weeks the preferred technique should be transabdominal CVS.

KYPROS NICOLAIDES

Ectopic pregnancy: the role of ultrasound-directed injection

The fact that there are four papers dealing with ultrasound diagnosis and treatment of ectopic pregnancies in a single issue of this journal highlights the contribution that vaginal ultrasound is set to make in the future management of this potentially lethal condition.

All four papers have cited the usefulness of hormone monitoring in the management of ectopic pregnancy and the importance of falling or rising levels is still not clearly understood. Falling levels of β -hCG would normally be associated with trophoblastic demise, but, despite this,