Routine ultrasound in pregnancy

Record Status
This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database.

Citation

Authors' objectives
The purpose of this assessment is to investigate the medical benefits of routine ultrasound during pregnancy and the risks to the mother and child, including the short-term and long-term physical risks and the psychological impact. The assessment also includes an analysis of economic costs. The Swedish government commissioned SBU to conduct this assessment.

Authors' conclusions
There is no scientific evidence to show that routine ultrasound examination creates a biological risk for the mother or the fetus.

It has not been proven that routine ultrasound examination during pregnancy reduces perinatal mortality or reduces morbidity among newborns.

Prenatal ultrasound examination influences the management of the pregnancy and the planning prior to delivery in a positive way. For example, since ultrasound is a superior method for showing whether more than one fetus is present, it can determine the position of the placenta, and assess the gestational age with certainty. The latter leads to fewer induced deliveries due to post-term pregnancies.

Routine prenatal ultrasound examination increases the detection rate of the congenitally malformed fetus.

In Sweden, fetal diagnostics in conjunction with routine ultrasound examination is - in contrast to the situation in nearly all European countries - not an expressed purpose of this examination. The scientific evidence suggests that fetal diagnostics should be routinely offered as a part of screening. The ethical, organization, and educational consequences in this context should be investigated.

Routine ultrasound examination is voluntary, but perceived by many expectant mothers to be an obligatory aspect of maternal health care. Information to expectant parents concerning the consequences of the examination - and the opportunity to refuse the exam - should be improved, particularly when fetal anatomy is studied. This information can be based on the facts presented in this report.

There is a need for continuing medical education for health services' staff in obstetrical ultrasound and in the area of psychological support when fetal malformation is suspected.

The organizational issues concern questions of competence, access to specialized knowledge, and the potential need to centralize fetal diagnostics. Further investigations of these issues should follow this report.

Although prenatal ultrasound examination has been used for many years, the scientific evidence is, in some respects, insufficient. This report exemplifies several areas where research is urgently needed, eg, at present there is no scientific evidence to suggest that more than one routine ultrasound examination during pregnancy is of value.