

Doppler ultrasound may be effective for high-risk pregnancies

Clinical question	How effective is Doppler ultrasound for assessing foetal wellbeing in high-risk pregnancies?
Bottom line	Current evidence suggests the use of Doppler ultrasound in high-risk pregnancies reduces the risk of perinatal death and results in fewer obstetric interventions (inductions of labour and caesarean sections). No difference was found in operative vaginal births or in Apgar scores less than 7 at 5 minutes. These studies compared the use of Doppler ultrasound of the baby's vessels in utero with no Doppler, or with cardiotocography (sometimes known as electronic foetal monitoring).
Caveat	The current evidence was not of high quality and, therefore, the results should be interpreted with some caution. Women with hypertensive disorders and with small-for-date fetuses are obvious candidates for umbilical artery Doppler; the role of umbilical artery Doppler in other risk groups, including women post term, with diabetes or with uncomplicated dichorionic twin pregnancy remains unclear.
Context	Abnormal blood flow patterns in foetal circulation detected by Doppler ultrasound may indicate poor foetal prognosis. It is also possible false positive Doppler ultrasound findings could encourage inappropriate early delivery.
Cochrane Systematic Review	Alfirevic Z et al. Foetal and umbilical ultrasound in high-risk pregnancies. Cochrane Reviews 2010, Issue 1. Article No. CD007529. DOI: 10.1002/14651858.CD007529.pub2. This review contains 18 studies involving just over 10,000 participants.
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[References]

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