

**Appropriateness and adequacy of scanning
procedures and analysis of results during pregnancy
(03HDC05925, 7 October 2004)**

Radiologist ~ Radiology clinic ~ Standard of care ~ Rights 4(1), 4(2)

During her pregnancy, a woman had five antenatal ultrasound scans at a small private radiology clinic, performed by a sonographer and reported by radiologists. The first was to assess viability at about six and a half weeks after she had had some bleeding, and the pregnancy was reported as viable. The next, a routine scan at about 19 weeks, and following the Australasian Society for Ultrasound in Medicine (ASUM) guidelines used by the clinic for mid-trimester scans, was reported by the radiologist as having no anatomical abnormality detected and average measurements for the period of gestation.

The woman's midwife referred her for a third scan at about 30 weeks' gestation, as the midwife was concerned about fetal growth rate and decreased movements. This scan was reported by the radiologist as normal, with measurements just below the 50th percentile, indicating reasonable growth. He also noted that the umbilical cord was near the baby's neck and possibly around it, and recommended specialist opinion and follow-up. The midwife arranged this, and also referred the woman for a fourth scan at 32 weeks in anticipation of the consultation with an obstetrician. The scan was reported as normal, with growth since the last scan and no sign of the cord near the back of the neck. A fifth scan was taken at 39 weeks because the midwife was concerned about the baby's position and the umbilical cord around the neck. The scan was reported as normal with good fetal movement and reasonable growth; the cord was again seen around the neck, and the radiologist recommended a second opinion with a scan at the hospital to investigate this.

At 41 weeks, the woman gave birth by emergency Caesarean section as the cord was indeed around the baby's neck and causing fetal distress. At birth, he was found to be missing his right leg and right testicle, and to have a two-vessel umbilical cord instead of three (one artery was absent). His parents complained about the adequacy of the scanning procedures and analysis of the results.

It was held that the radiologist breached Rights 4(1) and 4(2) in failing to detect the missing leg and two-vessel umbilical cord in the 19-week scan. The ASUM guidelines include a detailed checklist of anatomical features that should be identified at this point in a pregnancy, which was not adequately completed for this baby and constituted a significant departure from the guidelines and standard practice. In the subsequent scans, which focused on the umbilical cord, it was also held that the radiologist breached Right 4(1) in failing to detect the two-vessel cord.