Misdiagnosis of a non-viable pregnancy
15HDC00881, 13 September 2017

District health board ~ Sonographer ~ Radiologist ~ Obstetrician ~Emergency Medicine Specialist ~ Pregnancy ~ Ultrasound ~ Right 4(1)

A woman in her thirties underwent a transvaginal scan at the Early Pregnancy Clinic because of concerns that her β-hCG levels (a hormone produced during pregnancy) were rising at a slower than expected rate. The consultant obstetrician was unable to confirm a viable pregnancy as no fetal heartbeat was detected on ultrasound.

The woman attended the radiology department ten days later for a further viability scan. The sonographer accessed the woman's last three β-hCG results and then performed a transabdominal scan. He recorded on the sonographer worksheet that the mean sac diameter was 12mm, and that there was no observable yolk sac, fetal pole or heartbeat. The sonographer concluded on the worksheet that the pregnancy had not developed and was non-viable. He did not offer the woman a transvaginal scan or document that he had not done so.

Following the ultrasound, the woman attended an appointment at the Early Pregnancy Clinic. The ultrasound had yet to be reported on by a radiologist but the obstetrician accepted the sonographer's worksheet as accurate, and made arrangements for the woman to return to the Early Pregnancy Clinic in five days' time to schedule a dilation and curettage in the event that she did not miscarry naturally.

Three days prior to her scheduled appointment with the Early Pregnancy Clinic, the woman presented to the Emergency Department with complaints of constipation and vaginal discharge. The treating doctor signed off on the woman's latest β-hCG test result (which was consistent with a viable pregnancy) but did not inform her of the result.

The ultrasound images were reviewed by a radiologist. The radiologist said he saw that there were no transvaginal images, but did not document this detail in his report.

During her appointment at the Early Pregnancy Clinic, the woman requested a further ultrasound. A transvaginal ultrasound showed a viable embryo, and her pregnancy was able to continue.

Findings
It was held that the sonographer should have offered the woman a transvaginal scan and documented that one had not been done. In addition, it was incorrect to conclude that the pregnancy was non-viable based on his findings from the transabdominal examination. The sonographer failed to provide services to the woman with reasonable care and skill and, therefore, breached Right 4(1).

It was held that the radiologist also breached Right 4(1) by failing to report the absence of a transvaginal scan and that further investigation was needed to determine the viability of the pregnancy.

Adverse comment was made about the treating doctor in the Emergency Department for failing to inform the woman of the significant increase in β-hCG.

Adverse comment was also made about the district health board for its outdated policies and procedures; however, it was acknowledged that both the sonographer and radiologist should have been aware of, and complied with, the professional guidelines in place.

Recommendations

The Commissioner recommended that the sonographer arrange an audit of his first trimester viability scans and accompanying worksheets; report on his learnings from a professional development programme; and apologise to the woman. The Medical Radiation Technologists Board was asked to consider a review of the sonographer's competence.

The Commissioner also recommended that the radiologist arrange an audit of his reporting of first trimester viability scans in the last three months, and apologise to the woman.

It was recommended that the district health board use this case study to highlight the importance of clear communication between sonographers and radiologists; update the sonographer worksheet to identify that it is a provisional report, pending review and issuing of a final report by a radiologist; broaden the scope of an existing project on the storage of information to include consideration of transmitting ultrasound images to the Picture Archiving and Communication System or the clinical portal; and develop a specific guideline to clarify whether first trimester viability scans should be reported on urgently.