Misdiagnosis of ectopic pregnancy and communication about return of tissue
15HDC01258, 31 March 2017

District health board ~ Radiology clinic ~ Radiologist ~ Sonographer ~ Ectopic pregnancy ~ Return of tissue ~ Misdiagnosis ~ Communication ~ Rights 4(1), 6(1)

A 19-year-old woman was referred for an ultrasound by her general practitioner (GP) after positive pregnancy tests. The ultrasound was performed by a trainee sonographer, who informed the supervising sonographer that she thought the woman had a live ectopic pregnancy (a pregnancy outside the uterus) in the right fallopian tube. The trainee sonographer then rescanned the woman while the supervising sonographer observed. The supervising sonographer did not see a fetal heartbeat in the right fallopian tube and the images were not convincing for this diagnosis. However, she accepted the trainee's findings.

The trainee sonographer telephoned the radiologist and told him that she and the supervising sonographer both thought that the woman had a live ectopic pregnancy. The radiologist telephoned the woman's GP and recommended that the woman be referred to hospital for urgent specialist assessment.

The woman underwent surgical removal of her right fallopian tube, but subsequently was found to have a normal intrauterine pregnancy. Prior to surgery, she was provided with a consent form with a tick box relating to return of tissue, but return of tissue was not discussed with her adequately, and this section of the form was not completed. After surgery, the woman requested the return of her right fallopian tube. Subsequently, it was discovered that all of the tissue had been used during testing, and was placed in paraffin blocks. The paraffin blocks were melted down, and the woman's tissue was later returned to her.

It was held that the supervising sonographer should have taken over the care of the woman and re-assessed her herself, as well as conveyed any doubts about the diagnosis to the radiologist. By failing to do these things, the supervising sonographer breached Right 4(1). It was acknowledged that the trainee sonographer misinterpreted the scan, but this was mitigated by the fact that she was a trainee sonographer at the time and appropriately extended the examination and consulted her supervising sonographer. Criticism was made that the radiologist was aware that the images were not convincing for this diagnosis, but he failed to take further action in this respect.

The respective failings of staff in this case were matters of individual clinical judgement and the radiology clinic had appropriate policies in place at the time. Therefore, it was held not to have breached the Code.

On the basis of the information available to hospital staff at the time, it was appropriate to carry out surgery to remove the woman's right fallopian tube, but it would have been prudent for staff to have kept in mind the differential diagnosis of an early intrauterine pregnancy. The district health board (DHB) did not provide the woman with information that a reasonable consumer would expect to receive regarding the process for the return of tissue, including information relating to the timeframe, and the consequences of any decision relating to the return of tissue. It was held that the DHB breached Right 6(1). Criticism was also made that the DHB did not action the woman's request for the return of her fallopian tube within a reasonable timeframe.

It was recommended that the trainee sonographer, supervising sonographer and radiologist have an independent peer perform a quality review of a random selection of antenatal ultrasounds and sonographer's worksheets/radiology reports completed in the last 12 months. It was also recommended that the Medical Radiation Technologists Board consider whether a review of the supervising sonographer's competence was warranted. It was recommended that the radiology clinic review its supervision processes for trainee sonographers.

It was recommended that the DHB use this case as an anonymised case study for clinical staff, and conduct training for all obstetric/gynaecology staff at the hospital on the cultural and emotional significance of the return of tissue and body parts, and on its policy for the return of tissue and body parts.