Inadequate radiology report and insufficient information given to patient (03HDC08493, 31 August 2004)

Radiologists ~ Otolaryngology ~ Reporting of CT scan ~ Differential diagnoses ~ Standard of care ~ Sufficient information ~ Rights 4(1), 6(1)(a), 6(1)(f), 6(3)

A 63-year-old woman presented with a one- to two-month history of hoarse voice, significant weight loss and left vocal-cord palsy. She had been a heavy smoker, and 29 years previously had had cancer of the left breast, which had been treated by mastectomy and radiotherapy, resulting in significant post-radiation injury requiring surgical repair.

The woman was referred for an urgent CT scan of the chest and abdomen, because of a possible underlying mediastinal malignancy. The scan was read by a radiology registrar who, after discussion with his supervising consultant, dictated the report. As was standard hospital practice at the time, the radiologist signed out the report without it being seen by the supervising consultant.

The registrar reported fibrotic changes in the vicinity of the descending thoracic aorta and branch of the left main bronchus. He noted that the previous radiotherapy for the breast cancer may have caused the fibrotic changes; however, the possibility of malignancy could not be ruled out.

As the position of the growth meant that biopsy would be extremely difficult, the decision was made to follow up the vocal-cord damage and conduct another CT scan of the torso and abdomen in three months' time. The team felt that the cause was unlikely to be a malignancy but that a watching brief should be kept.

The otolaryngology registrar and surgeon referred the woman to a speech therapist and arranged for an appointment to have her vocal cords stripped. The woman said that the registrar told her the CT scan was normal.

A month later, a laser laryngoscopy was carried out, and histological examination of the material removed from the vocal cords showed no evidence of dysplasia or malignancy. In a letter to the woman's GP, the surgeon wrote that, while there was no evidence of malignant change in the material removed from the vocal cords, the presence of a 3cm lesion on the CT scan meant a repeat scan would be arranged as recommended. However, at a follow-up appointment, he told the woman there was no sign of cancer, as he did not wish to cause her "speculative alarm".

Effectively, the reading of these results meant that the scan was deferred two months from its original scheduling. By that time, the woman's left vocal-cord paralysis had increased and she was experiencing haemoptysis. An urgent scan revealed the mass detected five months earlier, and subsequent bronchoscopy and fine needle aspiration revealed adenocarcinoma of the upper lobe of the left lung. Her extensive prior radiation therapy made her a poor candidate for radiation therapy, and aortic stenosis compromised the efficacy of chemotherapy. The woman was referred for palliative therapy and died eight months later.

It was held that both the otolaryngology registrar and surgeon formed adequate management plans for the woman and arranged or undertook the necessary investigative procedures consistent with those plans, and did not breach Right 4(1).

However, the otolaryngology registrar was found in breach of Rights 6(1)(a) and 6(1)(f) in not providing the woman with information about a possible malignancy after the first CT scan, and inappropriately informing her GP that it was normal. The surgeon was held not to have breached Right 6(3) in initially telling the woman that he thought she did not have cancer. Although he conveyed information that subsequently turned out to be inaccurate, he took reasonable steps to answer the woman's questions honestly and accurately. However, in not giving the woman sufficient information about the possibility of malignancy and the need for a repeat CT scan, he was found in breach of Rights 6(1)(a) and 6(1)(f).

The radiology registrar and consultant radiologist were held not to have breached Right 4(1), in that their observations and findings with regard to the first CT scan were reasonable, and the recommendation for a repeat scan appropriate. However, the radiology registrar was held in breach of Right 4(1), as his report on the scan was not of a satisfactory standard; the consultant radiologist also breached Right 4(1) in not ensuring that the report was satisfactory. At the time, the radiology reporting system in place at the hospital did not mandate consultant review of registrars' reports, and it was held that the hospital was therefore also in breach of Right 4(1). The consultant radiologist advised that he now routinely checks registrars' reports, and the hospital has reviewed its procedures and instigated changes to ensure that such checks are made.