Delayed antibiotics for patient with sepsis (13HDC00343, 29 June 2015)

District health board ~ Public hospital ~ Emergency department ~ Sepsis ~ High INR ~ Effective communication across teams ~ Right 4(1)

A man aged in his early 60s experienced sudden severe back pain several weeks after having back and shoulder surgery. He was taken to the emergency care department of a public hospital (the ED) where he was assessed and diagnosed with musculoskeletal back pain. The emergency senior medical officer (SMO) who assessed the man said that the man was stable on physical examination with satisfactory vital signs, normal sensation in his legs, and an improvement over six hours of observation. No blood tests or X-rays were performed. The man was given analgesia and discharged.

Four days later, the man experienced back pain and dizziness, and was again taken to the ED by ambulance. He was assessed and found to have low blood pressure and an elevated heart rate. Blood samples were taken and X-rays were performed. At 11am, an emergency care medical officer special scale (MOSS) reviewed the man and the results of initial investigations, and queried sepsis. His plan included giving the man antibiotics. However, the MOSS discussed the man's presentation with the orthopaedic team, and they asked to review the man before antibiotics were given.

Following this, the man was reviewed by an Intensive Care SMO, to determine whether the man was eligible for a trial of patients with sepsis that was being undertaken. The SMO noted that the man's high INR discounted him from the trial. The SMO felt that the man did not need intensive care unit (ICU) care, and noted that his blood pressure had improved.

The man was reviewed by an orthopaedic registrar between 1.15pm and 2.15pm, but no antibiotics were given at that time. The man was reviewed by the medical team at 2.15pm and noted to be hypoxic and in acute renal failure. At approximately 4.30pm, the man had an MRI of his lumbar spine, which showed a large inflammatory mass and discitis. At 7.15pm, the man received intravenous antibiotics.

At 11.03pm, the man was transferred to the orthopaedic ward, but shortly afterward was transferred to the high dependency unit (HDU), as he was in respiratory distress. The man's INR was still high despite the administration of Vitamin K on three occasions. His INR was finally corrected at 3.50am following the administration of Prothrombinex. At 4.30am the man was transferred to ICU. However, he continued to deteriorate and developed multiple organ failure. The man died that evening.

It was held that on his second presentation, the man was promptly identified as having sepsis. However, he should have received antibiotics shortly after his admission, and the decision to withhold them was inappropriate. The lack of clear understanding in emergency care regarding when it is appropriate to withhold antibiotics contributed to this delay. In addition, given the man's presentation and concerning blood test results, including an INR over 10, he should have been transferred to ICU. The lack of effective communication among teams and across teams compromised the man's care. The DHB was responsible for the multiple failures of its staff, and breached Right 4(1).

Adverse comment was made about the DHB regarding the management of the man's pain, and for the delay in managing his concerning INR result. The DHB's record-keeping and documentation management was also criticised.

Adverse comment was made about the emergency SMO in relation to the man's first presentation.