Inappropriate co-administration of anticoagulants — identification of knowledge deficit 17HDC00191, 17 June 2019

District health board ~ Senior medical officer ~ Pulmonary embolism ~ Medication ~ Disclosure ~ Right 4(1)

A 75-year-old woman presented to the emergency department of a public hospital feeling generally unwell with a headache, shortness of breath (SOB), a tight chest, nausea, and lethargy, and was admitted to the Medical Assessment & Planning Unit.

The woman was under the care of a senior medical officer (SMO). The morning following her admission, the SMO started the woman on antibiotics for a urinary tract infection, and clopidogrel and aspirin for a transient ischaemic attack. The SOB was thought to be secondary to a pulmonary embolism (PE), or an exacerbation of her chronic obstructive pulmonary disease. The woman had a history of a PE. Later that day, the woman was started on enoxaparin (Clexane) in case she had a PE, and her clopidogrel treatment was stopped. She was transferred to the Medical Unit.

Following a delay owing to equipment failure, the woman had a CT scan of her chest, which confirmed bilateral PE. The SMO then started the woman on a further blood-thinning medication, dabigatran, in addition to Clexane. Either medicine can be used to treat PE, but they should not be administered together.

Initially, the woman appeared to be recovering, but she had a severe headache and elevated blood pressure. The SMO ordered a CT scan of the head, which showed a new subdural haemorrhage in the posterior fossa. The SMO planned to reverse the dabigatran with Praxbind. The SMO consulted with the on-call haematologist at another hospital, and learned that co-administration of dabigatran and Clexane is not recommended. Anticoagulation with dabigatran and Clexane was stopped, and the woman was transferred to the intensive care unit, where her condition deteriorated.

The SMO disclosed to the family that a potential medication error may have contributed to the woman's deterioration. The SMO apologised for the error. The woman was transferred home, and she died a short time later.

Findings

Services were not provided to the woman with reasonable care and skill. Issues regarding education, guidelines, and policy implementation at the DHB were identified, including the prescribing of contraindicated drugs, the SBARR implementation failure, inadequate content and communication of the open disclosure policy, inadequate anticoagulation guidelines, inadequate pharmacy review, and a systemic knowledge deficit regarding the correct use of dabigatran. Accordingly, it was held that the DHB breached Right 4(1). The Commissioner was critical that the SMO prescribed dabigatran and Clexane together when this was contraindicated, and considered that the manner in which the error was disclosed was not ideal.

Recommendations

It was recommended that the DHB (a) provide an update on its implementation of the recommendations in the Root Cause Analysis Report; (b) provide evidence of nursing staff orientation and training on the Early Warning Score; (c) consider implementing a policy for

the monitoring of haemostasis in patients on anticoagulation medications; (d) provide evidence of a prescriber alert system for anticoagulants; (e) audit 50 sets of clinical records; (f) take steps to improve its documentation and decision-making around the appropriate prescribing of anticoagulants; (g) update its anticoagulant guidelines; and (h) provide a written apology to the family.