

DIAGNOSTIC CHALLENGE

What are the chances?

Thomas L. Kersey, MB BS; Anthony J. Hudson, FFAEM; William Adams, FRCR

A 20-year-old female rear-seat restrained passenger was brought to the emergency department (ED) by ambulance after she was involved in a motor vehicle accident. The vehicle skidded on ice before colliding with a brick wall at unknown speed. There were no other casualties. The major findings on physical examination were altered level of consciousness (Glasgow Coma Scale score = 14), a laceration on the forehead, alcohol on her breath and right upper quadrant abdominal tenderness. In addition, she had a partial left hemiparesis (arm and leg) with an upgoing toe on plantar stimulation. Lumbar spine x-rays revealed a radiolucency through the body of the L2 vertebra, but her cervical-spine films were normal. Additional imaging studies in-

cluded a CT scan of the head, abdomen and lumbar spine.

The injuries most likely to explain the physical and radiologic findings are:

- A. L2 Chance fracture and normal CT head
- B. Middle cerebral artery thrombus and L2 Chance fracture
- C. Subdural hematoma and burst fracture of L2
- D. Cerebral contusion and L2 wedge compression fracture
- E. L2 burst fracture and normal CT head

For the Answer to this Challenge, see page 358.

From the Emergency Department, Derriford Hospital, Plymouth, Devon, United Kingdom

Received: June 22, 2005; accepted: July 21, 2005

Can J Emerg Med 2005;7(5):338