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 included 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.