UNUSUAL FRACTURE-DISLOCATION OF THE SPINE

Report of a Case

M. E. WINSTON, MANCHESTER, ENGLAND

A man aged twenty-four years was injured in a collision between a motor-cycle and a van. On admission to hospital he was shocked, and complained of pain in the back and "pins and needles" in the left leg. There was no disturbance of control of bladder or bowel.

On examination there were tenderness over the lumbar vertebrae, some weakness in the right lower limb, in the muscles of the hip and knee, and more extensive involvement of the left lower limb (Table I). Sensation was normal on the right side, but was impaired at the medial

FIG. 1

FIG. 2

Radiographs showing the fractures through the pedicles of L. 2, 3 and 4, with marked lateral displacement of the corresponding vertebral bodies.

aspect of the left leg. Reflexes were normal in the right lower limb, but on the left the knee jerk was diminished and the ankle jerk absent. *Radiographs* showed a fracture-dislocation of the lumbar spine at the level of L.2, 3 and 4. The line of fracture was through the pedicles of the three vertebrae and there was marked displacement of the affected vertebrae to the right (Figs. 1 and 2).

Treatment—Skeletal traction through the tibiae failed to effect reduction. A plaster jacket was applied at the end of two weeks.

TABLE I
MUSCLE POWER AT ONSET, AND THREE MONTHS LATER
(Medical Research Council Grading)

	Right lower limb		Left lower limb	
	November 1950	February 1951	November 1950	February 1951
Hip				
Abduction	2	5	0	4
Adduction	3	5	0	2
Flexion	3+	5	2	4
Medial rotation	4	5	0	1
Lateral rotation	4	5	2	4
Knee				
Flexion	4	5	2	4
Extension	3	5	0	2
Ankle				
Dorsiflexion	5	5	0	2
Plantar-flexion	5	5	4	4
Subluxation	5	5	0	4
Knee jerk	+	+	+-	+-
Ankle jerk	+	+	-	-
Plantar	↓	↓	↓	↓

Progress—Within three months the right lower limb recovered completely, and the left showed some recovery in all muscle groups (Table I). The patient was allowed up at three months, and was fitted with a spinal brace at five months. At that time, there was a slight further improvement in muscle power in the left lower limb. There was residual impairment of sensation over the front and sides of the thigh, and along the medial aspect of the leg.

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