

Our patient differs from most others described in that the symptoms and E.C.G. changes were readily reproduced on swallowing, without resort to balloon dilatation of the oesophagus. In addition his syncope was a presenting symptom of oesophageal carcinoma. Since an oesophageal lesion is commonly found in patients with "swallow syncope" we suggest that a barium swallow should be performed in all patients with this syndrome, even in the absence of dysphagia.

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Treatment of Fractures of the Long Bones in Brain Stem Injury

The partial maintenance of the position of a reduced fracture by the stabilizing action of the muscles with constant normal tone is well known. If the muscle tone becomes abnormally increased the muscles will displace the fracture by anteroposterior displacement or overlapping. Traction will only increase the abnormal tone of the muscles through the stretching reflex and displacement will increase. This is true in the conservative treatment of fractures of long bones associated with decerebrate rigidity due to brain stem injury, and this paper emphasizes the danger of such treatment.

Case Report

An 8-year-old boy, knocked unconscious by a car, had brisk reflexes with a positive Babinski sign and some generalized spasticity. There was a fracture deformity of the right femur. An x-ray examination of the skull and cervical spine showed no bony injury but that of the right femur showed oblique fracture at the junction of the middle third to the distal third. The diagnosis was a closed oblique fracture of the right femoral shaft associated with brain stem injury.

He was kept under observation and traction with a 1.8 kg weight in a Thomas splint was applied to the femur. An x-ray examination showed a 2.5 cm overlapping, and an anteroposterior displacement. The traction weight was increased by 1.8 kg. Two days later blood was noticed on the crêpe bandage around the thigh, and there was a 3.75-cm wound with a spike of bone protruding. This was treated by suturing the wound and applying skeletal traction. There was still persistent overlapping and anteroposterior displacement (see figure). Clinical examination at the time showed generalized rigidity with elbows in flexion, wrists in palmar flexion, and feet in equinus.

Two days later the thigh bandage was again wet with blood, and another wound, 2.5 cm long, was found in a different position from the previous one, with the spike of the proximal fragment of the fractured femur protruding through it. There was some redness of the skin around the wound and some skin crepitation. Gas gangrene was suspected. The patient had a total wound excision, muscle biopsy, and swab for culture. In addition, an open reduction and internal fixation of the fracture using a six hole plate was performed. Antibiotics were started after operation. The culture proved negative.



The displacement of the fracture persists. The skeletal traction did not improve the position of the fracture.

Discussion

The complications of fractures after electric convulsion treatment have been reported.<sup>1,2</sup> In a patient with a fracture any coexisting injury to the central nervous system with increased muscle tone can produce severe displacement of the fracture. Any lesion which cuts off the descending tract from the red nucleus and leaves Deiter's nucleus intact leads to decerebrate rigidity,<sup>3</sup> and this happens in brain stem injury. This results in full extension of the hips and knees and plantar flexion of the ankles. The arms may be extended or flexed and they are held firmly in this position.

The fluctuation in the level of consciousness determines the severity of the brain stem injury. If, after a head injury, consciousness is not lost or is rapidly gained no serious degree of injury to the brain stem will occur. The importance of this observation is that the original trace of resistance present on testing joint movement in the patient will not be followed by decerebrate rigidity and the fracture may be treated by conservative methods provided that the slightly increased muscle tone is not displacing the fracture.

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Reversible Infertility in Male Coeliac Patients

Though infertility reversed by treatment with a gluten-free diet has been reported in women with coeliac disease<sup>1</sup> it has not been reported in men. In our group of 40 men with coeliac disease, we encountered two in whom infertility was corrected after treatment for three and five years with a gluten-free diet.

Case Histories

The first patient was investigated for infertility at the age of 29 in 1964. He had been married for nine years. A physical examination was normal, as was his sexual function. His wife had been investigated a year earlier and no abnormalities found. In 1970 his G.P. referred him for investigation of aphthous ulcers. Tests showed a low serum folate level, faecal fats 19 g/dy, and subtotal villous atrophy on jejunal biopsy. Coeliac disease was diagnosed and a gluten-free diet started in September 1970. In 1974 repeat jejunal biopsy showed mucosal return to normal, and his wife gave birth to a healthy 7 lb (3.175 kg) male infant.

Seminal Fluid Analyses

Date	Vol (ml)	Count (Millions/ml)	% Motility
Case 1			
Before gluten-free diet			
13.10.64	2.0	4.0	20
20.10.64	2.0	7.5	5
16.3.65	2.0	3.0	5
30.3.65	2.5	1.0	50
20.4.65	1.0	2.0	5
18.5.65	2.0	5.0	30
1.6.66	1.5	4.0	10
After gluten-free diet			
20.9.71	2.0	1.0	5
28.9.71	2.0	1.0	5
5.10.71	3.5	5.0	50
10.11.71	1.5	32.0	20
17.1.74	2.0	10.0	50
Case 2			
Before gluten-free diet			
1.7.52	2.0	1.0	5
8.7.52	2.0	1.0	5
After gluten-free diet			
4.2.74	4.0	20	42
11.2.74	4.0	10	60