## CASE REPORT

## AN UNUSUAL SUICIDE METHOD USED BY A PARAPLEGIC

## By DR A. CHAPUIS and DR P. DOLLFUS Centre de Readaptation, Mulhouse, France

**Abstract.** The case of an unusual suicide attempt is related. First the method, the use of a mussel pin and secondly the consequences at the level of the spine. The osteomyelitis changed an upper motor neurone level lesion into a lower one.

Key words: Paraplegia; Vertebral osteomyelitis; Suicide.

THERE are several different ways to commit suicide for a paraplegic and most of these have already been recorded in the medical literature. The classical methods (at least in our Western world), are the intake of poison, over-doses of medicine, section of the wrist veins, etc. In some cases we have definite proof that self-neglect is one way of committing suicide.

We would like to relate the case of an unusual suicide attempt by a paraplegic patient: Michael P...., 18 years of age, sustained a motorcycle accident on 3 August 1975. His paraplegia, due to a fracture dislocation of T10, was complete and immediate below T10. He was treated in a traumatology clinic by open reduction and fixation with two Roy Camille plates. He was rehabilitated for several months in another centre.

The first time he was admitted in October 1977 (two years after his accident), at the Centre of Mulhouse was for a neurological check-up. The paraplegia was complete and spastic below T10 with an automatic bladder, sphincter and erection function. At that time he was complaining of a constant and intense pain in the lumbar region and stiffness in the dorsolumbar spine. X-ray showed a 'fracture' of the two lower screws (Fig. 1). He was readmitted in June 1978 and the plates were removed. This removal was followed by only transitory disappearance of the pain but there was improvement of movement in the dorso-lumbar spine. At the Centre de Readaptation of Mulhouse he had vocational assessment evaluation and afterwards underwent a training course, in electronic wiring, from September 1978 to July 1979. Psychologically he was very anxious, had family problems some of which had existed before he had his accident. He was also finding social integration difficult. Because of his anxiety he failed the examination at the end of the training year in spite of very good marks obtained during the year. To make matters worse the possibility of vocational reintegration was difficult in his region. A few job proposals resulted in failure. Because of these failures the patient became very depressed. In June 1980, he pierced his abdomen just below the umbilicus (below the sensory level), twice with a mussel pin, each time pushing the pin deeply backwards. This mussel pin, the blade of which is approximately 10 cm long and 3 mm wide is of the type which is used to eat mussels in the southern part of France. Unexpectedly, how-



FIG. 1

ever, there was no immediate bleeding or other complication from this gesture but three weeks later infection occurred. No cause was found and in fact he did not even, at the time, relate this septic condition and the suicide attempt.

He was re-admitted to the centre in October 1980, because of a deterioration in his condition, with an oscillating temperature, nearly normal in the mornings and up to  $38^{\circ}$ C in the evenings. His white blood count varied between 11000 and 8000 per cu mm, but he was under wide spectrum antibiotics. Neurological examination on admission showed the same sensory level, an increase of spasticity, and an aggravation of his usual constipation. There was no urinary infection. The antibiotics were stopped but were resumed when the result of the blood cultures came back positive with a staphylococcus D sensitive to Gentamycin and Ampicilin. The first X-rays of the spine were mistakenly centred on the old fracture and showed no new abnormality. Because of his previous recurrent urinary infection an intravenous pyelogram was performed but this was normal. On the straight X-ray of the abdomen an important but



Fig. 2

apparently old bony alteration between L3 and L4 vertebrae was seen. A few days later an abscess appeared posteriorly, situated between L3 and L4 and aspiration yielded a sterile sero-haemorrhagic fluid. X-rays again centred on L3 and L4 showed evidence of infection of bone and disc resulting in a dislocation and lysthesis of L3 and L4 (Fig. 2). Neurological examination on the same day showed total disappearance of the spasticity and complete disappearance of reflex activity below L2, including the reflexes of the conus medullaris. Complete urinary retention developed, necessitating intermittent catheterisation. After consulting with our neurosurgical colleague a conservative therapeutic attitude was adopted including postural reduction for 6 weeks, massive antibiotherapy and intermittent urinary bladder catheterisation.

There was immediate improvement in the patient's general condition but the neurological state remained stationary. Good hypetrophic consolidation was acquired in the affected vertebrae (Fig. 3). The antibiotherapy was maintained for three months. Micturition was only possible by a Crede manoeuvre, alpha-blocking medication having been used (phenoxybenzamine). His general condition is now restored. On the

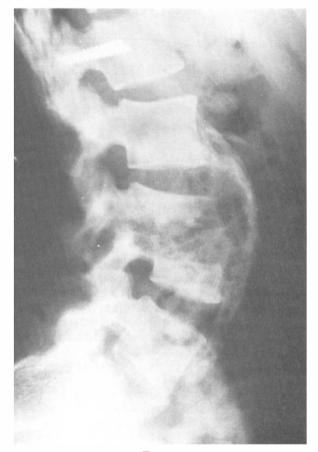


Fig. 3

neurological side the lesion is still complete below T10 with some flexor spasticity of the hips, total abolition of any reflex activity below L3 and complete loss of erection function.

The patient probably inoculated himself with a staphylococcal infection when he pierced his abdomen with the mussel pin. As nothing happened immediately after the suicide attempt no action was taken until the osteomyelitis became apparent.

## SUMMARY

An unusual suicide attempt by a paraplegic is presented. The suicide was not only unusual by the method used but also caused unusual infections especially an osteomyelitis of two lumbar vertebrae, changing an upper motor neurone lesion into a lower motor neurone one.