Letter to the Editor

Acute myelopathy in association with heroin addiction

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Joseph *et al*¹ have recorded a case of spinal cord infarction due to a self-inflicted needle stick injury.

They describe a patient who was a heroin addict and was on methadone to cover withdrawal. Being unable to get intravenous access, they used a 23 G needle inserted into the left-hand side of the patient's neck. The patient suffered immediate loss of power in his lower limbs.

Initially, they suggest, in the title and the case history, that this was a penetrating injury causing ischemia. However, in the discussion, they suggest it was owing to the injection of the chemicals in the vicinity of the anterior spinal artery. They postulate that this resulted in vasospasm of the vessel causing infarction of the cord. They reject the suggestion that this is due to penetration directly into the cord, because it is so-well protected.

It would seem unlikely that there was a direct penetrating injury to the cord for the reasons which they suggest, and it is far more likely that it is due to the wellrecognized complication of transverse myelitis from heroin addiction, which was first described by Richter *et al*² and Richter *et al*.³

In three cases described by Ell *et al*,⁴ the patients were all heroin addicts who had intravenously injected adulterated street heroin. The drug was injected peripherally, not into the neck and it led to oedema of the spinal cord with an incomplete paraplegia and followed

the same pattern as in the case described by Joseph *et al.*¹ This complication is common in the United States and unfortunately is being seen in this country.⁵

J Silver National Spinal Injuries Centre, Stoke Mandeville Hospital, Aylesbury, Bucks, UK

References

- 1 Joseph G, Santosh C, Marimuth R, Fraser NH, McLean AN. Spinal cord infarction due to a self-inflicted needle stick injury. *Spinal Cord* 2004; **42**: 655–658.
- 2 Richter RW, Pearson J, Brunn B, Challenor YB, Brust JCM, Baden MM. Neurological complications of addiction to heroin. *Bull NY Acad Med* 1973; **49**: 3–21.
- 3 Richter RW, Pearson J. Heroin addiction related to neurological disorders. In: Richter RW (ed). *Medicol Aspects of Drug Abuse*. Harper and Row: Hagerstown 1975, pp 320–327.
- 4 Ell JJ, Uttley A, Silver JR. Acute myelopathy in association with heroin addiction. J Neurol Neurosurg Psychiatry 1981;
 44: 448–450.
- 5 Traub M. Acute transverse myelopathy. In: Swash M & Oxbury J (eds). *Clinical Neurology*, Vol. 1. 1991, pp 570–575.

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