Major sequelae, such as paraplegia and the formation of a haematoma or abscess in the vertebral canal, are extremely rare after central neural block. Because of that rarity it is essential that every case is examined in detail to see what lessons there are for others, so that the future risk of such disasters is minimized. This issue of British Journal of Anaesthesia contains a report of an extradural abscess that occurred in a patient who had received multiple injections of both local anaesthetic and corticosteroid drugs in the management of a chronic pain syndrome [1].

In describing this patient and referencing selectively a number of others from the relatively recent literature, Bromage draws our attention to the problem associated with the interval between procedure and appearance of the early symptoms and signs. This interval may be so long that not even the patient associates new developments with the previous injection, the problem being compounded if presentation is at a hospital without a record of that procedure. The index of suspicion is thus low and damage to the spinal cord or cauda equina may be irreversible before the correct diagnosis is made. It is proposed that this delay could be minimized, or even averted, if patients wear “Medic-Alert” bracelets for a period of time after performance of the block. However attractive the proposal may be at first sight, it is important to recognize that there is much that we do not know about the condition. Extradural abscess occurs sporadically in the normal population and there are no good data on its incidence, with or without prior instrumentation of the vertebral canal. There is no clear evidence to suggest a cause and effect relationship, although it is difficult to argue against this when there is a temporal connection [2].

It may also be difficult, with the benefit of hindsight, to accept or understand any delay in diagnosis, but the evidence presented indicates clearly that such delay can occur.

Against this background, it is interesting to examine the new case he describes. The first point is that the patient would appear to have received extradural injections at the mid-thoracic level, yet the abscess formed in the lower cervical region and caused a quadriplegia. Was it related to the injection? Second, it was 10 days after the last injection before persistent symptoms developed. Does it take this long for an abscess to form? Perhaps though, the relative “trauma” of the journey the patient undertook 1 week after the last injection produced a haematoma within the vertebral canal, the contents of which had been made friable by repeated injections of steroids. Such a haematoma might then have become infected and produced an abscess within 2–3 days. The final concern is that conservative treatment was continued for 4 days after a consultant neurologist made a tentative diagnosis of extradural abscess. This condition, in common with extradural haematoma, is a medical emergency that requires early diagnosis and rapid management or permanent paralysis may result, as was sadly the case here.

One would wish that a full history had elicited the background of extradural injections for a chronic pain syndrome, particularly because the patient again presented with back pain. However, the other cases that Bromage cites show that a failure to make such a connection is not an isolated occurrence. He argues that some way of heightening awareness among subsequent medical attendants is needed and thus proposes a mandatory warning system in the form of the Medic-Alert bracelet. He recognizes that there are both financial and medico-legal implications, although he makes no mention of the cost of providing a bracelet to each patient (currently £30).

In the U.K. alone, many thousands of patients receive a subarachnoid or extradural injection each year and implementation would be expensive, in addition to generating significant paperwork. It would surely produce considerable patient anxiety about a complication that the great majority of anaesthetists (including frequent users of central neural block) may never see.

To disagree with the proposal does not imply that one can ignore the concerns that led Bromage to his conclusion, but a more measured approach is needed. First, we should never lose sight of the infective complications associated with our anaesthetic techniques and thus use a meticulous aseptic technique and aim to minimize local trauma. Central nerve blocks breach the very significant protection that nature provides for the central nervous system and this should never be done lightly.

Second, we need information on the incidence of extradural abscess and this requires collection of epidemiological data that include an accurate record of the number of central nerve blocks performed each year in large populations. The increasing requirement for medical audit suggests that such data may be collected more readily in future than they have been in the past. I accept that we need also to raise the index of suspicion among both patients and physicians when a patient presents with back pain sometime after a block. The difficulty in making any recommendation is that it should be based on assessment of the risk and this we do not have, and
of course any recommendation has to be related to the medico-legal climate in each country. Even a manoeuvre as simple as telling the patient to remember they have received a “spinal” injection if they develop any back symptoms in the succeeding month or two may cause untold difficulties. Until we have better information, I believe that any change from current practice is almost bound to be counterproductive.

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