

Is It Safe to Use Trans-epidural Spinal Cord Stimulating Needle?

To the Editor: I read the report of Kitazima T, et al.¹ with interest and have some questions about the report. First, these three patients, I suspect, could be treated with electrical stimulating acupuncture or transcutaneous electrical nerve stimulation. Why did they use such a dangerous method? Who can assure the patients to hold a position of inserted unfixed needle? Second, the site of inserted needle was not shown in the report, positioning of epidural electrode is one of the most important factors to relieve a pain. To know the precise stimulation condition, such as wave form, rate, strength and segmental level of spinal cord are important to resolve a mechanism of trans-epidural nerve stimulation. Third, how can one hold the inserted needle during the stimulation especially in the patients having spastic muscles or sever pain? Holding a same posture for twenty minutes is not easy for all patients. Since electrical trans-epidural spinal cord stimulation

is useful to treat an intractable pain as they mentioned, a short flexible electrode should be devised for daily and safety use.

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References

1. Kitazima T, Okuda Y, Matsumoto T, et al: Epidural spinal cord stimulation for treatment of outpatients with intractable pain. *J Anesth* 5:323-326, 1991

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In Reply: The letter from Dr. Yamashiro states that our method would be dangerous. Our method was used for 104 outpatients with intractable pain, all of whom were completely unresponsive to any drug, physical therapy and epidural block with local anesthetics. If we did not try this method, we would have given up the treatment totally. We had used the conventional method which necessitated the laborious insertion of a threadlike stainless steel wire into an epidural catheter. And its tip must be inserted into the epidural space using a 17 gauge Tuohy needle. This conventional method was too time-consuming and more dangerous. We were afraid of nerve or spinal cord injury and bleeding in the epidu-

ral space when the tip of wire was inserted.

Our method has been successfully employed since 1985, and 66 out of 104 outpatients (63.5%) showed marked or moderate improvement. There was no complication with this method. The needle is inserted at the selected interspace where the patient can feel mild twitching in the muscle of the tender spot during electrical stimulation. Therefore the site of puncture is slightly different from that of the implanted ESCS. It is one or two lower interspace. We wrote the frequency, time and strength in our paper. The patient is placed in the lateral position during electrical stimulation. The patient is free from danger if you explain

this method before the therapy.

I also hope that a flexible electrode will be devised.

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