

A display of the delivered current is not advantageous because:

- 1) The current required for supramaximal stimulation varies considerably between patients (Kopman 1984, Greer 2001). The best way to establish supramaximal stimulation is to gradually increase the stimulus current until the maximal response is elicited (Harper 1995).
- 2) Because the Microstim is a constant current stimulator, it is not subject to current-reduction as a result of high skin impedance. A non-constant current stimulator needs a display to indicate the delivered current.
- 3) A numerical display can give the erroneous impression to the inexperienced user that the display somehow indicates the magnitude of the muscle response.

References

- 1) Kopman AF, Lawson D. Milliamperage requirements for supramaximal stimulation of the ulnar nerve with surface electrodes. *Anesthesiology* 1984; 61: 83-85.
- 2) Greer-R; Conway-D; Harper-NJN. Neuromuscular monitoring in Intensive Care patients: Milliamperage requirements for supramaximal stimulation. *Br-J-Anaesth.* 2001 Oct; 87: 625-627.
- 3) Harper NJN. Monitoring Neuromuscular Blockade. in *Muscle Relaxants in Anaesthesia*. eds Harper NJN and Pollard BJ. Edward Arnold 1995. Chapter 6, pp 97-126.

Hope the above helps.

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