

Regional Intravenous Guanethidine vs. Stellate Ganglion Block in Reflex Sympathetic Dystrophies: a Randomized Trial

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Summary

Regional intravenous guanethidine blocks and stellate ganglion blocks have been compared in a randomized trial. Nineteen patients, randomly allocated to two groups of therapy and exhibiting severe reflex sympathetic dystrophy following peripheral nerve lesions, have been treated.

The performance of the intravenous guanethidine block is of longer duration and superior to stellate ganglion block, as regards some early pharmacological effects (skin temperatures and amplitude of plethysmographic waves recorded before blockade and 15 min, 60 min, 24 h, 48 h after institution of the block). In fact the intravenous guanethidine group shows a persistent and significant increase of the skin temperature and of the plethysmographic traces in the blocked side 24 h and 48 h after blockade in comparison with the patients treated with stellate ganglion block. Concerning the therapeutic effects (changes in pain scores and clinical signs — hyperpathia, allodynia, vasomotor disturbances, trophic changes, oedema and limited motion), recorded at the end of treatment and 1 month and 3 months follow-up, an intravenous guanethidine block carried out every 4 days up to a total of 4 blocks is comparable with a stellate ganglion block every day up to a total of 8 blocks.

The results of this study show that regional sympathetic block with guanethidine is a good therapeutic tool in the treatment of reflex dystrophies, especially on account of its negligible risks and contraindications.

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