

A Medical Alternative for the Treatment of Localized Hyperhidrosis

To the Editor: Hyperhidrosis is defined as spontaneous, and uncontrollable sweating in excess of that required for regulation of body temperature. The condition can be a severe social stigma and can have a considerable effect on patients' activities, personal relations and work, with the resulting negative impact on their overall quality of life.^{1,2} Bilateral endoscopic thoracic sympathectomy has become established in recent years as an effective, permanent, and safe technique for treating intense localized primary hyperhidrosis of the arms.³ Patients who develop postoperative compensatory sweating that does not respond to conventional medical treatment may benefit from topical application of 2% glycopyrrolate.

We undertook a 13-month observational study in 10 patients with postoperative compensatory sweating that did not respond to conventional treatment. The sexes were similarly represented and the mean age was 25 years. The patients applied 20 drops (1 mL) of glycopyrrolate solution once daily, preferably at night. Where the treatment was ineffective, it was increased to 2 applications per day. The first follow-up visit was carried out 2 weeks after starting treatment in order to check tolerance of the medication. Interviews were then conducted every 3 months to evaluate the improvement in sweating, using a subjective assessment scale (0=no improvement, 10=complete improvement) and a questionnaire on adverse effects that patients responded to at each visit. Follow-up lasted 1 year.

The mean sweating improvement score was 7.62 (range, 5-9). Only 2 patients reported adverse effects^{4,5} (abnormal vision and urticaria), which did not cause treatment to be discontinued. Urine retention has been reported by other authors,⁶ but was not observed in any of our patients.

We conclude that among the various pharmaceutical formulations of topical glycopyrrolate (solution, cream, or lotion),

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the aqueous solution is easy to prepare and convenient for the patient to apply. During the study period, no large variations were observed in pH, which stayed between 5 and 6 during the 3 months; we can therefore be sure of a stable, satisfactory pH similar to that of the skin (approximately 5.5). Although the aqueous solution of 2% glycopyrrolate was tried on few patients, the results were highly satisfactory.

All the patients showed improvement on the sweating scale (scores between 5 and 9 points), with good tolerance of the treatment. The 2% glycopyrrolate aqueous solution may therefore provide an alternative treatment for patients who have not responded to other therapies. However, the high cost of the product compared to other similar treatments and the

difficulty in obtaining it may limit its application

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