

# Topical glycopyrrolate for patients with facial hyperhidrosis.

Kim WO, Kil HK, Yoon KB, Yoon DM.

Department of Anaesthesiology and Pain Medicine, Anaesthesia and Pain Research Institute, Yonsei University College of Medicine, CPO Box 8044, Seoul, Korea. wokim@yumc.yonsei.ac.kr

## BACKGROUND:

Facial hyperhidrosis may negatively impact the quality of life. Although various conservative modalities have been suggested, the condition is not often treated successfully.

## OBJECTIVES:

To examine whether topical glycopyrrolate could be an effective and safe treatment for facial hyperhidrosis.

## METHODS:

Twenty-five patients with facial hyperhidrosis were enrolled and treated with 2% topical glycopyrrolate on one half of the forehead while the other half of the forehead was treated with a placebo.

## RESULTS:

The sweat production rate of the half of the forehead treated with topical glycopyrrolate was significantly reduced to  $37.6 \pm 2.8$  mg min<sup>-1</sup> (mean  $\pm$  SEM) compared with  $102.2 \pm 5.5$  mg min<sup>-1</sup> at the placebo-treated half of the forehead ( $P < 0.001$ ). Patients evaluated their degree of anhidrosis as excellent in six (24%) patients, good in 16 (64%), fair in two (8%) and poor in one (4%). Twenty-four patients (96%) were partially or fully satisfied with their fair to excellent anhidrosis; only one patient (who developed a transient headache after treatment) was dissatisfied with its therapeutic effect. Only seven patients (28%) experienced recurrence within 1 day while 17 patients (68%) had recurrence within 2 days. One patient (4%) remained stable for up to 4 days.

## CONCLUSIONS:

Topical glycopyrrolate application appears to be effective and safe for the treatment of excessive facial sweating in primary craniofacial and secondary gustatory hyperhidrosis following sympathectomy.

Br J Dermatol. 2008 May;158(5):1094-7. Epub 2008 Feb 22.