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LETTER TO THE EDITOR

Craniofacial Hyperhidrosis and Masking During COVID: Effectiveness of Topical Glycopyrronium Tosylate Cloth

Arthur M. Bobrove[1,*] and Jeffrey D Urman[2]

[1]*Department of Immunology/Rheumatology, Palo Alto VA Medical Center, CA, United States*
[2]*Department of Immunology/Rheumatology, Stanford University, CA, United States*

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Dear Editor

"Never let them see you sweat" is a quote from a popular novel that has become a part of our everyday vernacular [1]. However, those who suffer from craniofacial hyperhidrosis have a difficult time avoiding sweating, especially during stressful situations. Antiperspirants, including those by prescription, are generally of limited benefit for excessive facial sweating or may cause skin irritation.

Since Covid, wearing a mask that is clean and dry has become a necessity. Maintaining a dry mask for people with craniofacial hyperhidrosis can be difficult and poses a health and safety issue. We report on the off-label use of a topical anticholinergic medication to suppress excessive facial sweating in an adult with this condition. He had begun to use it before the pandemic with good results. With the advent of Covid, keeping his face dry became a necessity.

We describe a young college professor, who experienced excessive facial sweating that began in his twenty's. No secondary causes for his excessive sweating were present. He continued to experience sweating of his forehead, which was enough to wet his hair. This was especially the case when he was indoors. Stressful situations exacerbated the problem. At pre-covid holiday parties, he would often have to wipe his forehead throughout the event, which often made things worse. This made attending pre-Covid indoor events, that were unpleasant and anxiety-provoking.

None of the antiperspirants that he had tried, including prescription ones, had much effect. He was concerned about his upcoming wedding because he feared that his face would sweat excessively. This was prior to Covid. Given his desperate situation, and after informed consent, one of us offered him samples of Glycopyrrolium cloth 2.4% (Qbrexza) to apply to his forehead. This medication had been approved for the topical treatment of primary axillary hyperhidrosis [2, 3].

The night before his wedding day, he used a glycopyrronium cloth to wipe his forehead. It worked incredibly well. He did not sweat during the wedding ceremony and reception the following day. His wife affectionately would remind him, whenever their wedding would be mentioned, that she could not see a single bead of sweat on him, despite a room full of candles. He later obtained a prescription from his dermatologist for the medication and continued to wipe his forehead and hairline with a medicated cloth after showering. There have been no side effects other than slight thirst. After he started using it, he and his wife attended several holiday parties in late 2018 and 2019, and she would remark that he had the driest forehead at the party. In time, he found that he could reduce the frequency of application from daily to every other day.

1. DISCUSSION

It has been estimated that 4.8% or 15 million people in the US suffer from idiopathic hyperhidrosis [4], of which approximately 18% have excessive sweating of the face and scalp [5].

Established treatment of craniofacial hyperhidrosis includes a trial of over-the-counter or prescription-strength aluminum-based antiperspirants, which may be either ineffective or result in skin irritation. Although oral glycopyrrolate has been shown to be effective, the risk of excessive oral dryness limits its use [6]. There are reports of glycopyrrolate showing benefits when compounded into a cream and topically applied to the face [7, 8]. Botox injections may be very effective, but they have the risk of facial asymmetry [9].

It has been observed that obesity can exacerbate craniofacial hyperhidrosis [10]; encouraging significant weight

* Address of Correspondence to this author at the Department of Immunology/Rheumatology, Palo Alto VA Medical Center/ Stanford, University, CA, United States;Tel: (650)380-0551; E-mail: abobrove@gmail.com

loss may help to mitigate it.

Wiping the forehead may pose the risk of getting the medication in the eyes. Fortunately, this did not occur with our subject.

The CDC recommends replacing a mask if it is wet since wet masks are harder to breathe through, less efficient at filtering inhaled air, and can vent more around the edge of the mask than dry masks [11]. This would not be an issue for most individuals since one can simply remove a wet mask and replace it with a dry mask. However, with craniofacial hyperhidrosis and persistent facial sweating, there is no assurance of an effective barrier while wearing a mask.

The topical cholinergic medication has freed the subject from the burden of facial sweating, especially when teaching his classes, requiring him to have a dry face to ensure a dry mask.

CONFLICTS OF INTEREST

The author declares no conflict of interest, financial or otherwise.

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Declared none.

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