Sweating and Beta-Adrenoceptor Antagonists

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Among the negative side effects of beta-blockers that have already been studied [1], hyperhidrosis, to our knowledge, has never been reported clinically. We report 2 cases in whom we observed such side effects.

Case 1
A 51-year-old man undergoing skin treatment for a carcinoma of the nose considered cured. During a consultation, he complained of hyperhidrosis in the axillary and dorsal regions, forcing him to change shirts at least twice a day. He had been treated with sotalol for 5 years for ventricular extrasystoles and had also been taking a special combination of acetylsalicylic acid and glycine in order to prevent platelet coagulation.

Case 2
A 37-year-old man who had had a kidney transplantation in 1973 consulted a dermatologist for particularly marked hyperhidrosis in the axillary region. It had been evolving since 1987 and resisted all antiperspirants. Treated with prednisone and azathioprine since 1973, he was also taking acebutolol for severe arterial hypertension.

If, in the first case, joint responsibility of the two treatments mentioned in the hyperhidrosis phenomenon must be considered, this does not apply to the second case, where the sequence of treatments inclines us to suspect only the beta-blockers. Neither patient was hypoglycaemic as a result of beta-blocking treatment. According to the literature, hypoglycaemia provoked by beta-blockers is mainly observed in diabetic children treated with insulin and in children receiving no hypoglycaemic treatment after a fasting period [2-4].

Varying sweating was observed during exertion, with a significant increase (13%) measured by Mallion et al. [5] in healthy volunteers given beta-blockers. In order to limit hyperhidrosis by inhibiting dehydration, Gordon [6] recommends the use of cardioselective beta-blockers in patients with coronary heart disease and making considerable physical efforts. Butt [7] considers that hyperhidrosis induced by antidepressant is not due to beta-adrenergic stimulation but to an imbalance between alpha- and beta-adrenergic stimulation, leading to relative beta-adrenergic overstimulation.

Consequently, faced with unexplained hyperhidrosis in patients treated with beta-blockers, it would be appropriate to take into consideration the role of these substances in the development of such an effect in order to warn the patients and/or answer their questions.
References

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