

RGH Pharmacy E-Bulletin

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A joint initiative of the Patient Services Section and the Drug and Therapeutics Information Service of the Pharmacy Department, Repatriation General Hospital, Daw Park, South Australia. The RGH Pharmacy E-Bulletin is distributed in electronic format on a weekly basis, and aims to present concise, factual information on issues of current interest in therapeutics, drug safety and cost-effective use of medications.

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Hyperhidrosis

Hyperhidrosis is excessive sweating in response to heat or emotional stimuli, and is classified as primary or secondary depending upon aetiology. Primary focal hyperhidrosis is a chronic idiopathic condition that, when severe, can be debilitating to the person's professional, psychological and physical well being. Hyperhidrosis most commonly affects palms, soles and axillae and occurs in about 2 – 3% of the population. The onset is most common in the 2nd and 3rd decades of life. There is some evidence for a genetic link but the cause is unknown. In terms of its pathogenesis, hyperhidrosis is thought to be due to a central abnormality of the hypothalamic sweat centre.

Secondary (pathological) hyperhidrosis can occur with endocrine disorders (most commonly thyrotoxicosis), neurological conditions, malignancies, infections and drugs. The mechanism for the latter arises from the fact that eccrine (sweat) glands are innervated by sympathetic (muscarinic) nerves that are activated by acetylcholine.

Drugs that have been reported to cause increased/excessive sweating include antidepressants, antipyretics, pilocarpine, hormonal agents, hyperglycaemic agents, anticholinesterases and sympathomimetics. Drug induced hyperhidrosis rarely requires pharmacological treatment, and may respond to dose reduction.

There are a number of management options available to treat idiopathic hyperhidrosis.

First-line therapy involves the use of an antiperspirant containing aluminium salts each morning. Simple antiperspirants provide relief for 6 to 12 hours and are most suitable for the axillae, but can also be used on the palms and soles. Alternatively, aluminium chloride hexahydrate 20% solutions may be used at night when the area is dry. Irritation is a known side effect. The addition of 4% salicylic acid may beneficially augment the effect.

If these simple approaches are not successful, for hyperhidrosis affecting the palms and soles, iontophoresis with tap water using a commercially available device for home use may be considered.

Therapeutic options involving the use of anticholinergic drugs such as oxybutinin (off-label use) or glycopyrrolate (only available in Australia through the Special Access Scheme) have been tried, but unpleasant side effects can limit the usefulness of these treatments.

Local injections of botulinum toxin type A, a neurotoxin which inhibits acetylcholine release from sympathetic nerve terminals is mostly used for the axillae, as use on the palms and soles is painful and requires local anaesthetic. Diltiazem, alpha-antagonists and clonidine have all been trialled but further evidence regarding their safety and efficacy is required.

If the above measures prove unsuccessful, surgical sympathectomy, or curettage or liposuction of eccrine glands for palmar hyperhidrosis may be considered. Compensatory hyperhidrosis is a potential complication.

This E-Bulletin is based on work by Rose Allin and Lisa Scupham, DATIS, RGH

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