

Treatment of palmoplantar hyperhidrosis

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S U M M A R Y

Palmoplantar hyperhidrosis, excessive sweating from the palms and soles, is often an embarrassing and disabling condition that afflicts individuals of all ages. Diagnosis is usually evident based upon the history and visible signs of sweating. Treatment of this condition has proven to be difficult; however, numerous treatment options are now available. The therapeutic armamentarium includes topical and systemic agents, iontophoresis, botulinum toxin injections, and sympathectomy, all of which will be discussed.

Introduction

Hyperhidrosis, an excessive rate of sweat secretion from the eccrine glands, is a disabling condition that affects both children and adults. With an incidence rate of 0.6 to 1% documented in the young Israeli population¹ and onset usually during childhood or adolescence, palmoplantar hyperhidrosis (excessive sweating of the palms and soles) has been noted to occur twenty times more frequently in the Japanese than in any other ethnic group.^{2,3} Palmoplantar hyperhidrosis may frequently be observed in chronic alcohol abusers.⁴ Unlike sweating on the remainder of the body, palmoplantar hyperhidrosis is induced by emotions, not thermoregulation. Hyperhidrosis of the palms and soles is remarkable in that it does not occur during sleep or sedation because the hypothalamic sweat control center receives input from the cerebral cortex. This varies from the ther-

moregulatory hypothalamic center controlling sweating from the rest of the body. Individuals with hyperhidrosis have morphologically and functionally normal eccrine glands however, their glands are hypersensitive to stimuli in the hypothalamic sweat centers.⁵ Patients with palmoplantar hyperhidrosis have hypothalamic sweat centers that are hypersensitive to emotional stimuli of cerebral origin.⁶ The number of eccrine sweat glands per individual varies from two to four million with the greatest density on the palms and soles.⁵

Diagnosis is evident by the history and visible signs of sweating. Many patients complain of social embarrassment and work-related disability due to palmoplantar hyperhidrosis. Unfortunately, this condition has not been easy to treat. Fortunately, many treatment options, including topical and systemic agents,

K E Y W O R D S

**Hyperhidrosis,
Excessive
Sweating,
Treatment,
Iontophoresis,
Sympathec-
tomy**

