

# Hyperhidrosis--causes and treatment of enhanced sweating.

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## **BACKGROUND:**

Basically two types of sweating exist: thermoregulatory and emotional sweating. They are controlled by different centers: thermo regulatory sweating is regulated predominantly by the hypothalamus, emotional sweating predominantly by the limbic system. Enhanced sweating, called hyperhidrosis, can be generalized or focal. Primary focal hyperhidrosis is the most common type and affects the axillae, hands, feet, and face--areas principally involved in emotional sweating. Secondary hyperhidrosis develops due to dysfunction of the central or peripheral nervous system.

## **METHODS:**

Review based on a selective search of the literature via Medline and on the guidelines of the Association of the Scientific Medical Societies in Germany (Arbeitsgemeinschaft der wissenschaftlichen medizinischen Fachgesellschaften [AWMF]).

## **RESULTS:**

Various conservative and surgical treatments exist for hyperhidrosis. Conservative treatment options are the local application of aluminum chloride, tap water iontophoresis, and the intracutaneous injection of botulinum toxin. Surgical approaches include endoscopic sympathectomy and axillary tumescent curettage and liposuction, removing the sweat glands. Systemic drugs (e.g. anticholinergic substances) can be used in the treatment of generalized hyperhidrosis.

## **CONCLUSION:**

A step-by-step approach is recommended for the treatment of hyperhidrosis. Local treatment options with few and minor side effects should be tried first.

Dtsch Arztebl Int. 2009 Jan;106(3):32-7. Epub 2009 Jan 16.