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A case of palmo plantar hyperhidrosis in a young patient

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Abstract
Hyperhidrosis affects 2.5% of population. It may be generalised or focal. Palmoplantar hyperhidrosis seriously impairs quality of life and causes social embarrassment. Most of the cases are idiopathic. We report a case of a 19 year old boy suffering from palmoplantar hyperhidrosis who was treated successfully with iontophoresis.

Keywords: palmoplantar, hyperhidrosis, iontophoresis

Introduction

Case report

A 19 year old male patient was brought to medicine OPD of Goa Medical College with history of excessive sweating from both palms and soles. Patient was suffering from this condition since childhood, however it had worsened since last 6 months. He had difficulty in completing his projects in college as his pen would slip from his constantly wet hands and would also wet papers while writing. He would face public embarrassment as his friends avoided shaking hands with him. He would soak his socks repeatedly and his shoes would smell badly. There was no evidence of excessive sweating from axilla, groins, torso, chest or head. His condition would worsen with stress especially during exams. He would even sweat excessively in winter. He was constantly depressed due to his condition. Recently he had started getting auditory hallucinations and was diagnosed to have Schizophrenia. He was started on tablet Olanzapine 20 mg since last 3 months. There was no history of palpitations, tremors, involuntary weight loss, heat intolerance or fever. He denied history of alcohol consumption or illicit drug abuse. No history of similar illness in his family.

On examination, his vitals were stable. No lymphadenopathy, no tremors. No signs of thyrotoxicosis. No goitre. On investigation, his Complete blood count, renal function test, liver function test, fasting blood sugar level and thyroid function test were normal. Ultrasound abdomen showed normal suprarenal gland.

Patient was advised to apply 20% aluminium chloride lotion on palms and soles once a day at night. Patient showed significant improvement however patient did not go in complete remission. So he was referred for a session of iontophoresis following which he showed drastic improvement. Currently he is under regular follow up and requires iontophoresis once every 15 days. He has regained his confidence and is socially interacting well with his friends. His antipsychotic dose is reduced to Olanzapine 5 mg at night.

Discussion

Primary hyperhidrosis is characterised by excessive sweating than that is required for body's thermoregulation[1]. Its prevalence ranges from 1 to 3% [2, 3]. It affects males and females equally. It could be generalised or focal (palmar, axillary, craniofacial, inguinal, plantar) [4, 5]. It is worsened with stress and is present in all seasons including winter. Diagnostic criteria [6] include excessive sweating lasting at least six months without any apparent secondary cause and including at least two of the following: bilateral and symmetric sweat, at least one episode per week, impairment of daily activities, age at onset less than 25 years, presence of family history, absence of sweat during sleep. Excessive sweating can be demonstrated using minor test (starch iodine) test [7] wherein 2% iodine is applied to the test area and subsequently starch is sprinkled. Hyperhidrotic area solubilises iodine which favours complexation reaction with starch which leads to dark blue stain. Once hyperhidrosis is confirmed it is imperative to rule out secondary causes [8, 9] like endocrine (thyrotoxicosis, pheochromocytoma, diabetes mellitus), neurologic (spinal cord injury), hematologic (Hodgkins lymphoma, myeloproliferative disorder), infectious (tuberculosis, brucellosis), drugs like fluoxetine, venlafaxine, amitriptyline. Treatment options [10] include application of 20% Aluminium Chloride, iontophoresis, anticholinergic drugs, injection of Botulinum toxin, or in severe cases video assisted thoracic sympathectomy (VATS) [11]. Our patient had palmoplantar hyperhidrosis which used to worsen with stress. We ruled out secondary causes. Then we treated him with topical therapy (20% Aluminium Chloride) and iontophoresis following which patient showed improvement.

Conclusion

Physicians should be aware of primary hyperhidrosis although it is a rare condition. It causes significant social humiliation and emotional stress that may lead to depression. Hence it is imperative to detect this treatable condition and manage appropriately.

Conflict of interest

None

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