

TAP WATER IONTOPHORESIS IN THE TREATMENT OF PAEDIATRIC HYPERHIDROSIS

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Aim: The treatment options for localised hyperhidrosis include aluminium chloride antiperspirants, anticholinergics, iontophoresis, botox and surgery (thoracic sympathectomy). Tap Water Iontophoresis (TWI) involves immersing the affected area in tap water and passing a small electrical current through the area. Our aim was to assess the success of this therapy in a paediatric cohort.

Methods: A retrospective case note review of all patients under the age of 18 years who had TWI between 2002- 2015 was undertaken. Demographic data, number of treatment sessions, side effects and overall success were analysed. Typically individuals undergo 7 treatments over a 4-week period. A positive outcome was determined as a patient who saw an improvement in their symptoms based on a drop in the hyperhidrosis severity score (I-IV). Data are presented as mean with range in parentheses. Statistical analysis was by paired t-test.

Results: There were 43 patients (30 female, 13 male) with a mean age of 15 years (8-17). Nine patients (21%) had a family history of hyperhidrosis. Palmar and/or plantar hyperhidrosis (PPH) was present in 38/42 (90%) patients. Axillary hyperhidrosis (AH) was present in 19/42 (44%) patients. All patients (with the exception of one patient who did not tolerate the procedure) underwent a mean of 7 sessions (5-7). Side effects included pain (n=11), pruritus (n=11), dryness (n=5) as well as vesicle formation and burning sensation (n=1). A positive outcome was found in (36/43) 84% of patients. Mean pre-treatment hyperhidrosis severity score was 3.5, post treatment was 2 (p=.0001). No improvement in symptoms was seen in 4/43(9%) of patients.

Conclusion: TWI is a safe and effective modality of treatment for both PPH and AH in the paediatric population. It has minimal side effects. Paediatric surgeons should offer this treatment option before considering more invasive surgical procedures.