
ABSTRACT

OBJECTIVE: The aim of the present study was to prospectively, randomly, blindly, and objectively investigate how surgery affects plantar sudoresis in patients with palmar and plantar hyperhidrosis over a one-year period using a sudorometer (VapoMeter).

METHODS: From February 2007 to May 2009, 40 consecutive patients with combined palmar hyperhidrosis and plantar hyperhidrosis underwent video-assisted thoracic sympathectomy at the T3 or T4 ganglion level (15 women and 25 men, with a mean age of 25 years).

RESULTS: Immediately after the operation and during the one-year follow-up, all of the patients were free from palmar hyperhidrosis episodes. Compensatory hyperhidrosis of varying degrees was observed in 35 (87.5%) patients after one year. Only two (2.5%) patients suffered from severe compensatory hyperhidrosis. There was a large initial improvement in plantar hyperhidrosis in 46.25% of the cases, followed by a progressive regression of that improvement, such that only 30% continued to show this improvement after one year. The proportion of patients whose condition worsened increased progressively (from 21.25% to 47.50%), and the proportion of stable patients decreased (32.5% to 22.50%). This was not related to resection level; however, a lower intensity of plantar hyperhidrosis prior to sympathectomy correlated with worse evolution.

CONCLUSION: Patients with palmar hyperhidrosis and plantar hyperhidrosis who underwent video-assisted thoracic sympathectomy to treat their palmar hyperhidrosis exhibited good initial improvement in plantar hyperhidrosis, which then decreased to lesser degrees of improvement over a one-year period following the surgery. For this reason, video-assisted thoracic sympathectomy should not be performed when only plantar hyperhidrosis is present.