Endoscopic Thoracic Sympathetic Block Using Clipping for Palmar and Axillary Hyperhidrosis


Endoscopic thoracic sympathectomy or sympathicotomy is a safe and effective method for treating primary hyperhidrosis. However, postoperative compensatory sweating may be troublesome for some patients. There have been few reports of sympathetic block using clipping for patients with primary hyperhidrosis. Therefore, we present our experience of endoscopic thoracic sympathetic block using clipping in treating palmar and axillary hyperhidrosis. Between January 1997 and March 2000, 250 patients with palmar or axillary hyperhidrosis underwent endoscopic thoracic sympathetic block using clipping with an 8 mm, 0° thoracoscope (Karl Storz, Germany). There were 115 men and 135 women with a mean age of 24.1 years (range, 9 to 54 years). All patients were placed in a semi-sitting position under single-lumen intubated anesthesia. One hundred and ninety patients with palmar hyperhidrosis underwent T2 sympathetic block using clipping at the second and third ribs. A similar procedure of T3 and T4 sympathetic block at the third, fourth and fifth ribs was performed in 60 patients with axillary hyperhidrosis. Postoperative questionnaires were sent to all patients. Among the 250 patients, 500 sympathetic block using clipping were achieved. The operation was usually accomplished within 20 minutes (range, 16 to 30 minutes). Most patients were discharged within 4 hours after operation. Postoperative complications were minimal, including mild pneumothorax in one patient who only needed closed chest drainage for 2 days. There was no surgical mortality. The mean postoperative follow-up period was 24.2 months (range, 3 months to 39 months). Improvement of palmar or axillary hyperhidrosis was obtained in all patients. Two hundred and twelve patients (84.8%) developed compensatory sweating of the trunk and lower limbs. One patient with palmar hyperhidrosis received a reverse operation which included the removal of the endo clips. The patient had improvement of compensatory sweating 14 days after removal of the endo clips. Endoscopic thoracic sympathetic block using clipping is a safe and effective method for treating primary hyperhidrosis; compensatory sweating may be improved after reverse operation by means of removal of the endo clips.

Key words: palmar hyperhidrosis, axillary hyperhidrosis, primary hyperhidrosis, endoscopic thoracic sympathetic block