Letter to the Editor

Monitoring of palmer skin temperature in thoracoscopic sympathectomy

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We read with interest the article entitled `Needlescopic video-assisted thoracic surgery for palmar hyperhidrosis' by Yim et al. [1]. Based on our extensive experience in the treatment of palmar hyperhidrosis (PH) with thoracoscopic sympathectomy, we would like to comment on several important points.

Thoracoscopic sympathectomy was reported by Kux in 1977 as a primitive keyhole vision technique, but it did not become popular until 1990 when we first developed the `video' endoscopic technique to treat patients with PH. The technique provided a magnified and well-illuminated view, and subsequently this video thoracoscopic sympathectomy became widely accepted as a standard treatment for patients with PH [2].

Meanwhile, we first advocated the use of intraoperative monitoring of palmar skin temperature (PST) as an aid to confirm correct and adequate sympathectomy leading to long-term relief of PH. We found that electrocoagulation of T2 segment (which contains the major part of T2 ganglion and the adjacent nerve fibers), confirmed by the significant elevation of PST, achieved long-term relief of PH [3,4]. Extensive dissection of the sympathetic trunk is not only unnecessary and time-consuming, but also poses a high risk of injury to the adjacent vessels [5].

The incidence of postsympathectomy compensatory hyperhidrosis varies greatly from 30 to 70%, because it depends on the patients geographic location, the humidity and temperature of working environment and the season in which it was surveyed. Furthermore, we found that the more extensive the sympathectomy, the more serious the compensatory hyperhidrosis [5]. As for the position and anesthetic technique, we found it is much convenient to perform bilateral sympathectomy with the patient in semi-Fowler’s supine position and under single-lumen endotracheal general anesthesia, rather than the patient in the lateral decubitus position and under selective ventilation with a double-lumen tube [6].

We have experience in using a 10-mm operating thoracoscope with one surgical port and a needlescope with two ports. We found the former technique is easier and more convenient than to use the latter, and patients who underwent either operation experienced no wound pain and achieved good cosmetic results.

References