Awake one stage bilateral thoracoscopic sympathectomy for palmar hyperhidrosis: a safe outpatient procedure

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Thoracoscopic sympathectomy remains a controversial procedure. This relates to the precise indications and patient selection for the procedure, the approach by thoracoscopy using 1, 2 or 3 ports or by a small axillary thoracotomy, the technique and extent of ablation of the sympathetic trunk and the treatment of communicating branches, especially to avoid complications as compensatory truncal hyperhidrosis or Horner’s syndrome. In this manuscript the authors add another controversial issue: whether or not the procedure is feasible under local anaesthesia as an outpatient procedure.

A provocative, novel and original series of 15 patients undergoing awake one stage bilateral thoracoscopic sympathectomy under local anaesthesia and spontaneous breathing is described. After a short stay in the outpatient clinic, these 15 patients were discharged the same day. This group is compared to 30 patients having the same intervention under general anaesthesia. Median age was 28.1 years in the group operated under local anaesthesia and 29.4 years in the general anaesthesia group. In both groups no conversion to thoracotomy was necessary. After a mean follow-up time of 7.16 months both groups had an improvement in the quality of life without any difference between both anaesthesia techniques. Cost analysis showed an advantage for the group operated under local anaesthesia. By performing the procedure under local anaesthesia in a patient who is breathing spontaneously, the authors state that the disadvantages of single lung ventilation are avoided. However, no mention of complications due to single lung ventilation is made in the 30 patients undergoing general anaesthesia and one-lung ventilation. The mean operating room time for the whole bilateral procedure under local anaesthesia was 64 versus 86 min in the group undergoing general anaesthesia. In a recent study, 176 patients underwent thoracoscopic sympathectomy via a transaxillary single-port approach and one-lung ventilation [1]. In this study, the operating time for one side was only 9 min and for both sides less than 20 min. So, it is questionable whether single lung ventilation is really harmful in these patients.

Although this is a consecutive series of patients undergoing thoracic sympathectomy for palmar hyperhidrosis, it is not clear how patients were precisely selected for this procedure. How many patients were evaluated but excluded afterwards? Due to a potential selection bias, results of this non-randomised study should be interpreted with caution. Whether this technique is feasible for other indications as e. g. digital ulcerations in older patients with vasospastic or immunologic disorders with arteritis or occlusive arterial disease also remains to be determined.

The authors are to be commended for bringing this novel technique to our attention, showing that is it feasible to perform a thoracic sympathectomy under local anaesthesia in young patients with its possible advantages of rapid discharge and cost containment. However, its real clinical value and benefit need to be demonstrated in larger comparative studies.

Reference