

Thoracoscopic Sympathectomy (VATS)

Humberto S Machado*

Centro Hospitalar do Porto, Anesthesia Department, Largo Professor Abel, Salazar, Porto, Portugal

Thoracoscopic sympathectomy or also called video assisted thoracoscopic sympathectomy (VATS) has been practiced for several years to treat hand and underarm excessive sweating or hyperhidrosis.

Hyperhidrosis may be an embarrassing condition even causing disability, affecting predominantly young people [1], either in the daily life or even in special occasions like professional events or tasks.

VATS technique has evolved and at present time can be performed with two [2] or even one single thoracoscopic port [3,4]. Uncertainty exists about the most useful technique regarding the patient analgesic satisfaction on the postoperative period [5].

Surgery consists on the isolation and dissection of the thoracic sympathetic chain with cauterization and ablation or clipping, the corresponding roots that are responsible for the excessive sweating in certain body areas [6].

Operative related side effects might include: recurrence of palmar hyperhidrosis, Horner syndrome (oculosympathetic palsy), conversion to open surgery, residual pneumothorax, minimal hemothorax, compensatory hyperhidrosis in other body areas [7].

Quality of life generally improves in patients submitted to thoracoscopic sympathectomy, especially in young patients [8].

Anesthesia technique for VATS ranges from general anesthesia with one-lung ventilation, alternatively in both sides when a bilateral operation is to be performed, to a single port approach with spontaneous ventilation regional anesthesia and sedation [9,10].

One-lung ventilation using a double lumen tube appears to be the most used technique and usually provides the best surgical operating field; nevertheless, specially when a bilateral procedure is done, bilateral lung expansion and residual pneumothorax should be systematically monitored with a postoperative chest x-ray after emergence from anesthesia, with the patient fully awake and breathing spontaneously.

Several centers have engaged good clinical protocols for this procedure on a day-case basis [11,12]. Unexpected admission to a

hospital inpatient ward may range from 0% to 3% in several series, depending on the case mix included in these studies [12]. Main reasons for hospital admission include the complications usually pointed as more frequent, such as pneumothorax or hemothorax [7].

References

1. Ravari H, Rajabnejad A (2015) Unilateral Sympathectomy for Primary Palmar Hyperhidrosis. *Thorac Cardiovasc Surg*.
2. http://thoracicsurgery.stanford.edu/patient_care/hyperhidrosis.html
3. Chen JT, Liao CP, Chiang HC, Wang BY (2015) Subxiphoid single-incision thoracoscopic bilateral ablative sympathectomy for hyperhidrosis. *Interact Cardiovasc Thorac Surg*.
4. Günel N, Ozpolat B, Dere Günel Y, Dural K (2014) Single port thoracoscopic sympathectomy for primary palmar hyperhidrosis in adolescence. *Turk J Med Sci* 44: 79-83.
5. Young R, McElnay P, Leslie R, West D (2014) Is uniport thoracoscopic surgery less painful than multiple port approaches? *Interact Cardiovasc Thorac Surg* 20:409-414.
6. Thomsen LL, Mikkelsen RT, Derejko M, Schroder HD, Licht PB (2014) Sympathetic block by metal clips may be a reversible operation. *Interact Cardiovasc Thorac Surg* 19: 908-913.
7. Ibrahim M, Allam A (2014) Comparing two methods of thoracoscopic sympathectomy for palmar hyperhidrosis. *JAAPA* 27: 1-4
8. Baroncello JB, Baroncello LR, Schneider EG, Martins GG (2014) Evaluation of quality of life before and after videothoracoscopic sympathectomy for primary hyperhidrosis. *Rev Col Bras Cir* 41: 325-530.
9. Jeong JY, Park HJ (2010) Sympathicotomy under local anesthesia: a simple way to treat primary hyperhidrosis. *Ann Thorac Surg* 90: 1730-1731.
10. Awad MS, Elzeftawy A, Mansour S, Elshelha W (2010) One stage bilateral endoscopic sympathectomy under local anesthesia: Is a valid, and safe procedure for treatment of palmer hyperhidrosis? *J Minim Access Surg* 6: 11-15.
11. Molins L, Fibla JJ, Perez J, Sierra A, Vidal G, Simon C (2006) Outpatient thoracic surgical programa in 300 patients: clinical results and economic impact. *European Journal of Cardiothoracic Surgery* 29: 271-275.
12. Ghosh-Dastidar MB, Deshpande RP, Rajagopal K, Andersen D, Marrinan MT (2011) Day surgery unit thoracic surgery: the first UK experience. *European Journal of Cardiothoracic Surgery* 39: 1047-1050.

***Corresponding author:** Humberto S Machado, Head of Department, Centro Hospitalar do Porto, Anesthesia Department, Largo Professor Abel, Salazar, Porto, Portugal, Tel: +351913389448; Fax: +351220900644; E-mail: hjs.machado@gmail.com

Received: May 23, 2015; **Accepted:** May 25, 2015; **Published:** May 29, 2015

Citation: Machado HS (2015) Thoracoscopic Sympathectomy (VATS). *J Preg Child Health* 2: e115. doi:[10.4172/2376-127X.1000e115](https://doi.org/10.4172/2376-127X.1000e115)

Copyright: © 2015 Machado HS. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.