



Nonintubated single port video-assisted thoracoscopic thymectomy: a promising future of treatment

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We read a new article written by Pompeo *et al.* about glowing surgical technique of single port video assisted thoracoscopic thymectomy with spontaneous ventilation for myasthenia gravis patients (1). Although the concept of minimal invasive surgery through a single incision on nonintubated patients is not a new one (2), it is really a challenge for myasthenia gravis patients. As we knew, myasthenia gravis is an autoimmune disease characterized by muscle weakness. Theoretically, it might be beneficial for myasthenia gravis patients without using muscle relaxant during operation and reduce respiratory associated complications. However, there were no enough evidence to show that nonintubated anesthesia might reduce the possibility of postoperative myasthenia crisis with respiratory failure. Further detailed investigation with larger samples and longer follow-up was needed. Leuzzi *et al.* reported associated risk factors of postoperative myasthenia crisis (3), which included advanced Osserman stage, body mass index (BMI) >28, history of myasthenic crisis, duration of symptoms >2 years, and lung resection. Most of the predictors could be evaluated before surgery. It might be safer for surgeon to set up more stringent selection criteria for such kind of patients. Practicing a new technique or approach requires careful attention to patient selection. In addition, surgery itself is a precipitants of myasthenia crisis. How to reduce the possibility of video-assisted thoracoscopic surgery (VATS) thymectomy related complications is very important for myasthenia

gravis patients (4). Compared with open surgery, minimal invasive surgery seems to reduce postoperative respiratory complications in series of publications. However, we still try to find out a better operation method. Nonintubated operation has been proved its feasibility and safety in thoracic surgery. For thymectomy, it is a new attempt and challenging application. Applying awake non-intubated single-port VATS philosophy to myasthenia gravis patients might have a promising future, which could achieve quicker postoperative recovery, and less nausea following surgery, as well as improved postoperative mobility allowing for shorter hospital stay. Further prospective randomized clinical trial should be warranted to validate its role in the treatment of myasthenia gravis patients.

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