



講師

簡宏哲 Hung-Che Chien

授課主題

Subxiphoid Incision Approach for Thymic Tumor Resection — A Single-Center Experience and Perioperative Outcomes

以劍突下切口進行胸腺腫瘤切除手術的經驗分享

摘要

The subxiphoid approach has gained traction in recent years as a minimally invasive technique for thymic tumor resection, offering excellent exposure of the anterior mediastinum while avoiding intercostal nerve injury. In our institution, we performed 43 thymic tumor resections via subxiphoid approach, with a focus on surgical feasibility, perioperative outcomes, and anesthesia collaboration. The average patient age was 53.2 years, and 23 were male. Surgical procedures included 17 tumor removals, 24 thymothymectomies, 1 thymectomy without tumor, and 1 debulking surgery. Eight patients(18.6%) underwent a single-incision subxiphoid approach, while the remaining 34 had a multiportal approach. CO₂ insufflation was used in 36 cases(83.7%), and one-lung ventilation (OLV) was applied in most procedures to optimize visualization.

The mean operative time was 227.2 minutes, with an average blood loss of 60.9cc. Two cases required conversion to sternotomy(4.6%): one due to poor visualization, and another due to pulmonary artery trunk injury. Postoperative complications occurred in 9 patients, and five of them were class I. Only four patients(9.3%) were above class II which needed further treatments. One patient(2.3%) experienced postoperative hypercapnia and hypoxia in the postoperative care unit. Three patients admitted to the intensive care unit postoperatively, each with a stay of 3 days. The average chest drain duration was 2 days, and the mean postoperative hospital stay was 4.9 days. No 90-day mortality recorded.

Our experience demonstrates that the subxiphoid approach is a safe and effective option for thymic tumor resection, with acceptable operative times, low blood loss, and manageable complication rates. From a perioperative perspective, collaboration with anesthesiologists is critical, especially in coordinating OLV during tumor dissection and CO₂ insufflation. This approach facilitates optimal exposure but demands precise intraoperative ventilation and



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hemodynamic control. We believe that shared understanding between surgical and anesthesia teams enhances both safety and efficiency in these procedures. Further prospective studies may help refine patient selection and perioperative strategies for subxiphoid thymic surgery.