

AB003. Glove-finger extraction technique in uniportal video-assisted thoracoscopic surgery

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Background: Uniportal video-assisted thoracoscopic surgery (VATS) is increasingly being performed worldwide. During the operation, specimen extraction from a small incision less than or equal to 2 cm can be challenging without the use of a commercial specimen retrieval device. There have been no reports regarding the use of the glove-finger technique in uniportal VATS. The aim of this study was to assess the feasibility of the alternative specimen retrieval method by glove-finger technique.

Methods: We retrospectively investigated 50 patients with peripheral lung lesions who underwent uniportal VATS wedge resection with a 2-cm incision at Kaohsiung Medical University Hospital between August 2015 and December 2016. The cut end of the glove-finger was used to extract the specimen.

Results: Fifty-five wedge-resected specimens were extracted successfully by glove-finger technique. There was no conversion to two-port nor three-port VATS. After intraoperative frozen section analysis for all specimens, 24 were revealed to have primary lung cancer and subsequently underwent completion lobectomy or segmentectomy; the other 31 showed 10 pulmonary metastases, 9 pulmonary benign lesions, and 12 pulmonary infectious lesions. All specimens were resected with free margins and the mean diameter of the lesions was 1.64 ± 0.59 cm (range, 0.2 to 2.6 cm) by pathological examination. No intraoperative complication related to the technique was observed.

Conclusions: This is the first study to reveal the efficacy and benefits of the glove-finger extraction technique in uniportal VATS. In our preliminary experience, this method can decrease costs without compromising the quality and safety of patient care.

Keywords: Glove-finger; specimen extraction; uniportal video-assisted thoracoscopic surgery (uniportal VATS)

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