

Endoscopic laryngo-pharyngeal surgery (ELPS) - Prevention of surgical complications; Covering mucosal defects with fibrin glue and polyglycolic acid sheet (MCFP technique) and ELPS training-.

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Abstract:

Endoscopic laryngo-pharyngeal surgery (ELPS) is a trans-oral surgery technique using Satou's curved laryngoscope, with which superficial mucosal lesions are resected directly with the assistance of a flexible endoscope. In ELPS, the margins of superficial carcinomas are clearly visualized even in the entrance of the esophagus. However, surgical training seems to be necessary for this technique. ELPS was applied to 177 fresh laryngo-pharyngeal superficial carcinomas (113 cases) and 5 post-radiation cases of cancer rest or recurrence. In the 113 cases of fresh lesions, the disease-specific 5-year survival rate was 87.5%. In the post-radiation cases, no recurrence was recognized in the primary regions. A study of surgical complications suggested that postoperative bleeding and scar contracture are important. After the ELPS in two fresh cases, the MCFP technique (covering mucosal defects with fibrin glue and polyglycolic acid sheet) was tried. It is suggested that the MCFP technique is useful for pain control and prevention of scar contracture. We constructed an operation simulator using pig gastric mucosa and a resin skull for providing training on endoscopic surgery. This training seems to be effective for improving surgical skills and preventing surgical complications.