The Indication of Endoscopic Therapy for Early Gastric Cancer
(Comparisons of Electrocauterization Therapy and Laser Photocoagulation Therapy)

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Abstract:
We have performed endoscopic therapy for thirty lesions in twenty three cases of early gastric cancer. I would like to summarize that endoscopic therapy is very useful for the treatment of early gastric cancer patients to whom surgical laparotomy is not applicable; Second, high frequency current is indicated for the endoscopic treatment of resectable, salvageable lesions and laser rays for unresectable lesions. The effect of endoscopic therapy on the well-differentiated type of elevated early gastric cancer can be expected. Conversely, the closely observation are essential for the undifferenciated type of depressed early gastric cancer after endoscopic therapy.

Introduction:
Surgical resection has been believed to be the best treatment for the cancer in the alimentary tract. When the patient with gastrointestinal tract cancer can not tolerate laparotomy, chemotherapy is chosen, but the therapy usually can not offer satisfactory therapeutic effects. Recently, electrocauterization and laser photocoagulation through the endoscope has been put into practice for the treatment of early cancer in the alimentary tract. We applied the coagulating activity of laser rays to treat gastrointestinal tumor as we did with high-frequency waves. In this study we investigate the indication of endoscopical therapy and the prognosis of these patients.

Materials and Methods:
Thirty early cancerous lesions in twenty three patients who could not receive operative treatment were used in this study. Among them, six lesions in six patients received electrocauterization therapy and twenty four lesions in seventeen patients received laser photocoagulation therapy. Comparisons of the required time for treatment between these two therapeutic methods have been investigated. The prognosis of these patients have been studied about macroscopical type and histological type.
Results and Conclusion:

Laser therapy required shorter time for the type IIa, IIb, IIc and III early gastric cancers, while it required longer time for the type I early gastric cancer than the electrocauterization therapy. The choice of treatment method is determined by the elevated lesion with or without pedicle. Pedunculated lesions are an indication for electrocauterization therapy. On the other hand, laser photocoagulation therapy is indicated for the treatment of sessile and depressed lesions. The early pictures of the transiently recurrent four cases which can be treated again are hyperemia and erosion in the margin of posttreated lesion. The reason are thought to be due to failure of therapeutic effect of involve all of the cancerous area. Therefore, the accurate preoperative diagnosis of the infiltration of cancer is essential to prevent recurrence. The two recurrent cases which cannot be treated again are noted to be advanced cancer on detection. This is due to failure of laser to affect the deep area enough, which makes the residual cancer cells under the mucosa layer to develop recurrence of cancer. One case (100%) of early gastric cancer type IIa + IIc, three cases (50%) for type IIc and two cases (66.7%) for IIc + III are found to be recurrent. Early gastric cancer type I, IIa and IIb are not noted to be recurrent. Therefore, the closely follow up and observation are essential for the depressed type of early cancer after laser therapy. Conversely, the therapeutic effect of laser on the elevated type gastric cancer can be expected. Four out of five cases (80%) of undifferentiated carcinoma are found to be recurrent. But only two cases (11%) of the other histological type of carcinoma are recurrent. It suggests that the undifferentiated type carcinoma needs closer follow up than the well-differentiated type carcinoma after laser endoscopic therapy. The role of endoscopic treatment of early gastric cancer will be more and more important in circumstances where the old-age population is increasing.

References: