ENDOSCOPIC SUBMUCOSAL DISSECTION OF RECTAL CARCINOID TUMORS USING THE CLUTCH CUTTER

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Introduction

ESD shows high tumor eradication rates in early colorectal tumor but substantial risks during the procedure. To reduce the risk of complications related to ESD using conventional knives, we developed the Clutch Cutter (CC), which can grasp and incise the targeted tissue using electrosurgical current.

Methodology

I : Instrumentation

II : Patients characteristics

Period

Between June 2008 and December 2012
Number 12
Gender 7 male, 5 female
Age 28-79 yrs, mean 63 yrs
Tumor Location Rb 10, Ra-Rs 2

III : Endoscopic procedure

Sedation

Each patient was sedated with an intravenous injection of flunitrazepam (0.2-0.4 mg) and pethidine hydrochloride (35mg) and, if necessary, conscious sedation was maintained with an additional injection of flunitrazepam.

Techniques

1. Marking

- Forced coagulation mode 30W (effect3)
- Endcut mode (effect2, Duration3, Interval1)
2. Circumferential incision

- Submucosal excision

- Endcut mode (effect2, Duration3, Interval1)
3. Hemostatic treatment

- Soft coagulation mode100W (effect 5)

Power setting of VIO 300D

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Representative case

Carcinoid tumor, 8X8mm, sm, ly0, v0, pHM0, CD56 (+), MIB 1(+,<2%).

Summary

All lesions were treated simply without unintentional incision. The mean size of the tumors and resected specimens was 7.5±2.1mm (range: 5-11) and 25±8.3mm (range: 12-40), respectively. The en-bloc resection rate was 100%.

Conclusion

ESD using CC appears to be an easy, safe, and technically efficient method for resecting rectal carcinoid tumors.

References


Disclosure

Kazuya Akahoshi and Hidefumi Akahane (FUJIFILM) have applied for the patent in Japan, Europe, and USA for the Clutch Cutter described in this paper. China has already granted the patent.