

Two Cases of Rectal Carcinoid Tumor

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Abstract : Carcinoid tumors are enigmatic slow growing malignancies which occur most frequently (74%) in the gastrointestinal tract. Rectal carcinoids comprise 12.6% of all carcinoid tumors and represent the third largest group of the gut carcinoids. The initial symptoms of carcinoid may be nonspecific when present and symptoms are dependent on the location and extent of the tumor. The majority of patients with rectal carcinoid tumors are asymptomatic, and the tumor is after diagnosed incidentally at endoscopy, surgery, or autopsy. Rectal carcinoid tumors are generally small and rarely metastatic and it is known that about 15% of these tumors frequently metastasize to distant organs (especially, liver) when its size is larger than 2 cm. Endoscopic resection may be the best treatment for small tumors. Recently, we experienced two cases of rectal carcinoid tumors which were treated by endoscopic polypectomy, therefore, the cases are presented in this paper with a relevant literature review.

Key Words : Rectal carcinoid tumor, Endoscopic polypectomy

maffin cell

1867

[1],

Lieberkühn

1912 Saltikow가

Kulchitsky

entero-chro-

,

가 { 2- , 0.5 cm
 5). (Fig. 1)
 ,
 가 : 10
 가 :
 :
 가 120/80 mmHg, 80 / ,
 20 / , 36.5
 가 0.5
 cm 1.0 cm
 : , ,
 , 24
 2 5-hydroxy indole acetic acid (5
 -HIAA) 2.3 mg/dL (1.6-6.0
 mg/dL)
 ,
 1. 1 : 10
 cm 0.5 cm Yamada 1
 : O , , 47
 :
 : 1 가
 가



Fig. 1. Colonoscopic finding shows 0.5 cm- sized yellowish polypoid mass with central depression on the rectum.

chromogranin(focally +), synaptophysin(+), NSE(+), S-100(+)
(Fig. 2.).

, 36.5

, 24 5-HIAA 0.7 mg/dL
(1.6-6.0 mg/dL)

2. 2

5 cm 1 cm

: O , , 59

3).

(Fig.

가

가 :

120/80 mmHg,

70 / ,

20 /

74%가

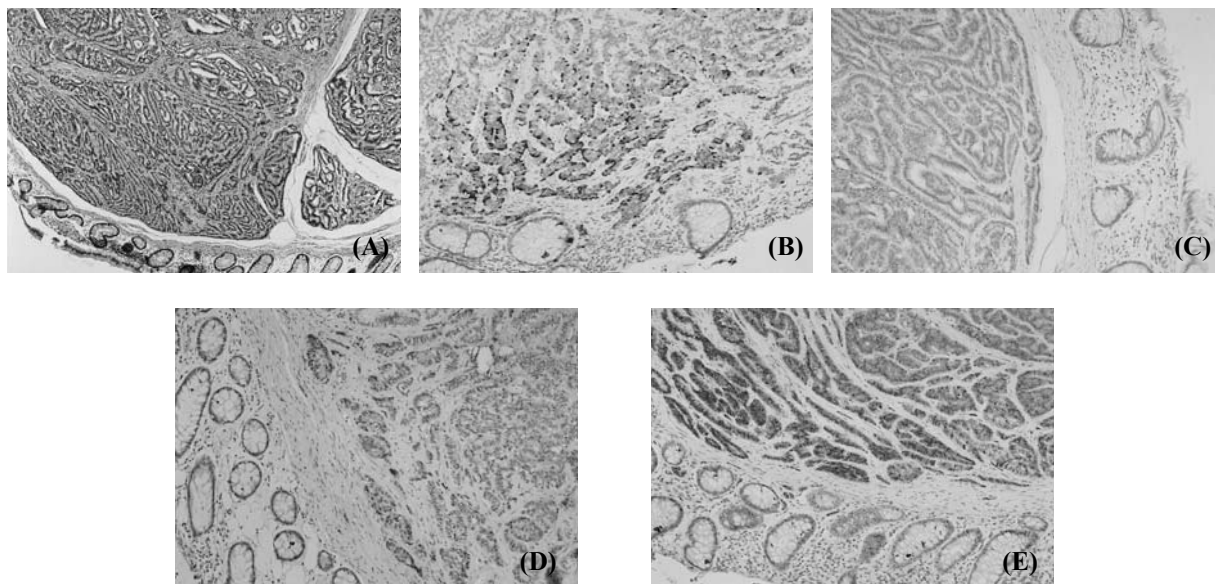


Fig. 2. Microscopic findings of resected specimen. A. Tumor cells are growing beneath overlying epithelium, and partly infiltrating into the mucosa. The tumor cells consists of plemorphic, hyperchromatic nuclei with some cytoplasm (H&E stain, $\times 400$). B ~ E. Immunohistochemical stains ($\times 100$) of the tumor cells are positive reactivity for chromogranin (B), synaptopysin (C), NSE (D) and S-100 (E).

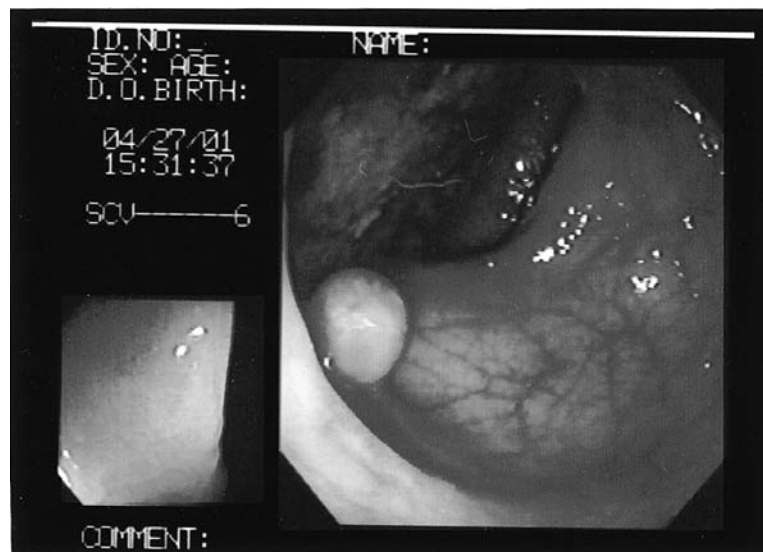


Fig. 3. Colonoscopic finding shows 1.0 cm-sized polyp on the rectum about 5 cm above anal verge.

(29%), (19%), 가 .
 (13%) [6].
 (58.8) , 4-13
 cm [7].
 5-HIAA, serotonin serotonin
 가 30 md/dL
 가 [9].
 carcinoid
 50% 75%
 90%
 가 2 cm
 [8].
 carcinoid
 14% 가
 가 [10]. Naunheim [11]
 31%
 , 가
 (polypoid), (umbili-
 cal), (annular)

가 2 cm
가
[12], 가 2
cm 가

[13].

doxorubicin, 5-fluorouracil, dacarbazine, cisplatin
streptozotocin 5-fluorouracil, cyclophosphamide, methotrexate, doxorubicin

, Takeuchi [14]

가
methotrexate 5-fluorouracil
1
가 가

[15]. 2 cm 5 100%
2 cm 40%
가 0.5 cm 1.0 cm

가 가
가 가

2

1. DeVita VT Jr, Hellman S, Rosenberg SA. *Cancer: principles and practice of oncology*. 5th ed. In: Jensen RT, Norton TA, Carcinoid Tumors and the Carcinoid Syndrome. Philadelphia: J.B. Lippincott Co; 1997, p. 1704.
2. , , . carcinoid tumor. 1973; **11**: 93-7.
3. , , . 1 . 1999; **19**: 130-6.
4. , , , , , . 1 . 2000; **21**: 807-10.
5. , , , , , . Carcinoid 6 . 1990; **10**: 381-6.
6. Godwin JD 2nd. Carcinoid tumors. An analysis of 2837 cases. *Cancer* 1975; **36**: 560-9.
7. Moyana TN. Gastrointestinal endocrine cells and carcinoids: histogenetic and pathogenetic considerations. *Pathol Ann* 1995; **30**: 227-46.
8. Jetmore AB, Ray JE, Gathright JB Jr, McMullen KM, Hicks TC, Timmcke AE. Rectal carcinosis; the most frequent carcinoid tumor. *Dis Colon Rectum* 1992; **35**: 717-25.
9. Modlin IM, Tang LH. Approaches to the diagnosis of gut neuroendocrine tumors: the last word (today). *Gastroenterology* 1997; **112**: 583-90.
10. Modlin IM, Sandor A. An analysis of 8305 cases of carcinoid tumors. *Cancer* 1997; **79**: 813-29.
11. Naunheim KS, Zeitels J, Kaplan EL, Sugimoto J, Shen KL, Lee CH, et al. Rectal carcinoid tumors: treatment and prognosis. *Surgery* 1983; **94**: 670-6.

12. Shirouzu K, Isomoto H, Kakegawa T, Morimatsu M. Treatment of rectal carcinoid tumors. *Am J Surg* 1990; **160**: 262-5.
13. Higaki S, Nishiaki M, Mitani N, Yanai H, Tada M, Okita K. Effectiveness of local endoscopic resection of rectal carcinoid tumors. *Endoscopy* 1997; **29**:171-5.
14. Takeuchi I, Ishida H, Suzuki T, Nakada H, Tada M, Idzumi Y. A case of liver metastases of rectal carcinoid successfully treated with hepatic arterial infusion of methotrexate and 5-fluorouracil. *Gan to Kagaku Ryoho* 1999; **26**: 1929-32.
15. Ulich TR, Cheng L, Glover H, Yang K, Lewin KJ. A colonic adenocarcinoma with argentaffin cells: an immunoperoxidase study demonstrating the presence of numerous neuroendocrine products. *Cancer* 1983; **51**: 1483-9.