

中文題目：以大腸鏡成功切除類癌

英文題目：Successful colonoscopic resection of two well-differentiated neuroendocrine tumors

作者：郭力元¹，謝毓錫^{1,2}

服務單位：大林慈濟醫院¹內科部，²消化內科

Abstract

Well-differentiated neuroendocrine tumors (NETs) most commonly originate in the gastrointestinal tract and lung. Colonoscopy is used both diagnostically and therapeutically and permits detection and treatment of colorectal tumors. Hereby, we report two cases of incidentally found asymptomatic rectal NETs which were completely resected via colonoscopy.

Introduction

Well-differentiated neuroendocrine tumors (NETs), which was known as “carcinoid tumors,” most commonly originate in the gastrointestinal tract and lung and rarely arise in the genitourinary tract. They are relatively rare tumors. The incidence of rectal carcinoid is reportedly 1.3% of all rectal tumors (Modlin IM, 1997). In tumors <2 cm, the rate of metastasis was 2 percent of patients if the tumor was confined to the submucosa, but as high as 48 per cent if the tumor invaded the muscularis propria (Naunheim KS, 1983). Endoscopy resection has been reported as a reliable treatment (Strosberg, 2020).

Case report

Case 1

Mr. Liao was a 61-year-old man. He did not smoke or consume alcohol. He had past medical history of (1) hypertension and (2) parietal abscess, status post incision and drainage on 2013. He came to our OPD for itchy anus.

Colonoscopy revealed one rectal submucosal tumor, 1.2cm in diameter. Endoscopic mucosal resection with variceal ligation device was performed to completely remove it. The pathological report showed grade I (no mitotic figures) NETs.

Case 2

Mr. Chan, a 43-year-old man, had past medical history of ankylosing spondylitis. He visited our OPD for bloody stool and frequent diarrhoea. Colonoscopy showed a rectal submucosal tumor, 1.2 cm in diameter. Endoscopic mucosal

resection with variceal ligation device was performed to remove it, and the pathological report revealed neuroendocrine tumor, grade I. The resection margin was free of tumor. A subsequent computerized tomography scan showed no metastasis or lymphadenopathy.

Discussion

Well-differentiated NETs arise from enterochromaffin (neuroendocrine) cells of the aerodigestive tract. They were initially referred to as "carcinoids" because they seemed morphologically different and clinically less aggressive than the more common adenocarcinomas in the gastrointestinal tract. The term enterochromaffin refers to the ability to stain with potassium chromate (chromaffin), a feature of cells that contain serotonin. Most NETs are associated with carcinoid syndrome only when they have metastasized to the liver.

For well-differentiated NETs, prognosis is mainly dependent on tumor size and depth of invasion, as reflected by the T-stage classification (Strosberg, 2020). (Strosberg, 2020) In tumors <2 cm, the rate of metastasis was 2 percent of patients if the tumor was confined to the submucosa, but as high as 48 percent if the tumor invaded the muscularis propria (Naunheim KS, 1983).

Treatment options for localized rectal NETs include conventional endoscopic resection (standard polypectomy or endoscopic mucosal resection [EMR]), mucosal resection with variceal ligation device, advanced endoscopic resection (endoscopic submucosal dissection, transanal endoscopic microsurgery [TEM], cap-assisted EMR), transanal surgical resection, or radical resection (low anterior resection [LAR], abdominoperineal resection [APR]) (Masahide E, 2018).

Conclusion

Well-differentiated NET is a relatively rare tumor and can be an accidental finding in colonoscopy. We presented two cases of well-differentiated NETs in this report. Both of them were successfully treated with endoscopic mucosal resection variceal ligation device.

References

1. Modlin IM, S. A. (1997). An analysis of 8305 cases of carcinoid tumors. *Cancer*, 79(4):813–829.
2. Strosberg, J. R. (2020, September 20). *Clinical characteristics of well-differentiated neuroendocrine (carcinoid) tumors arising in the gastrointestinal and genitourinary tracts*. Retrieved from UpToDate.com: <https://www.uptodate.com/contents/metastatic-well-differentiated-gastrointestinal-neuroendocrine-carcinoid-tumors-systemic-therapy-options-to-control-tumor-growth>
3. Masahide E, S. N. (2018). Endoscopic submucosal resection with an endoscopic variceal ligation device for the treatment of rectal neuroendocrine tumors. *International Journal of Colorectal Disease*, <https://doi.org/10.1007/s00384-018-3152-1>.
4. Naunheim KS, Z. J. (1983). Rectal carcinoid tumors--treatment and prognosis. *Surgery*, 94(4):670.