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A Very Rare Occurrence of Medullary Carcinoma; in the Rectum: A Case Report

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Case Report	Abstract: Medullary carcinoma of colon and rectum is the rarest of all colorectal adenocarcinoma cases. Because of the medullary carcinoma in rectum there are no almost in literatures, we aimed to present this case. Patients with rectum medullary
*Corresponding author Erol Kilic	carcinoma complaints or symptoms could similar to rectum adenocarcinomas; rectal bleeding and anemia. Diagnosis and treatment methods of medullary carcinoma in rectum, same as other rectal carcinomas. Medullary carcinoma's of rectum prognosis is
Article History Received: 12.05.2018 Accepted: 21.05.2018 Published: 30.05.2018	better than other rectal carcinomas. Treatment of rectum carcinoma is Total Mesorectal Exision (TME) that accepted as gold standard in the surgical treatment of middle and upper third rectal carcinomas since it reduces the local recurrence and contributes to the survival. In cases with tumor in the rectum, rarely medullary carcinoma may be. Medullary carcinoma in rectum symptoms, signs and treatment similar to other rectum
DOI: 10.36347/sasis.2018.v04i05.008	cancers. Keywords: medullary carcinoma, rectum, anterior resection, total mesorectal exision.
■約回 記録編編	İNTRODUCTION Altough medullary carcinoma (MC) is rare and tend to place at right colon and rectum, almost there is no literature which placed in rectum.

CASE PRESENTATION

The 56-year-old female patient applied with the complaints of rectal bleeding and anemia. In physical, digital/rectal examination, no mass was detected, but colonoscopy revealed an about 5-cm polypoid ulcer vegetative mass starting from the 10th cm of the rectum.

Hgb was 10 mg/dl. Abdominal CT scan revealed thickening on the rectal wall. The patient underwent low anterior resection (Total Mesorectal Excision-TME) and anastomosis was performed. Oral feeding was started on the 5th postoperative day and the patient was discharged without any complications on the 7th postoperative day. In the histopathological examination of the rectal material; a 6,5x4x4 cm polypoid mass was observed. It was 4 cm away from the distal surgical end. There was no lymphovascular invasion but it invaded into the lamina propria. Twentyfive lymph nodes metastasis-(pathological stage pT2N0). Sitokeratin7-, sitokeratin20 was focal+, CEA+, LCA-, cdX2 focal nuclear+, p53+ for 10% of the cells, and Ki-67 proliferation index was 90%+. Pathological diagnosis is medullarry carcinoma. Written informed permission was obtained from the patient.

DISCUSSION

Medullary carcinoma of the colon and rectum is characterized by the enlarged cells having sheet-like or trabecular growth pattern, eosinophilic cytoplasm, vesicular nucleus and prominent nucleoli, and by the

tumor infiltrating lymphocytes [1]. Macroscopically, MC exhibits an expansive growth and has high microsatellite instability. Histologically it is poorly differentiated; however it has a good prognosis. Although colon adeno carcinomas are highly ck20 and cdX2 positive, MC is often ck20 and cdX2 negative [2]. In colorectal MC, loss of intestinal transcription factor (cdX2) and MLH1 mismatch repair gene proteins are blamed for the ethiopathogenesis [1]. Medullary carcinoma is the rarest of all colorectal carcinoma cases with the rate of 0.03%. It is more common in females than in males. Although it has been reported to be observed in the ascending colon and rectum [3], there are almost no cases of MCR in the literature [4]. According to the International Documentation of Colorectal Cancer; when examined with RRSS, if the distance between the lower most margin of the tumor and the anal verge is 16 cm or less, it is considered to be rectal cancer. If the lower margin of the tumor is within 16 cm from the anal verge, it is defined as rectal tumor [5].



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The term "anterior resection" (AR) is used for the operations in which the anastomosis site is above the peritoneal reflection. "Lower anterior resection" (LAR) defines the operations in which the anastomosis level is below the peritoneal reflection. The oncologic principles of the LAR in rectal carcinoma have been determined by the total mesorectal excision (TME) technique.

In 1970s, developed the autonomic nerve preservation (ANP) technique to prevent the urogenital complications (39-76%) which develop due to nerve injuries caused by the surgical dissection [6]. Today combined the TME and ANP techniques and gave TME its final form. This technique is the gold standard in the surgical treatment of RC. TME's main principle involving the removal of the tumor and mesorectum. TME, the mesorectum including potential tumor deposits can be removed and local recurrence incidence can be reduced [7]. Since distal mural spread do not exceed 1 cm, radial margin is more important than the distal margin for local control. In series of 52 patients underwent curative surgery, in 27% of these, radial margin positivity was found to be <1 mm and the local recurrence rate was 85% [8].

Rectal tumor's distal mesorectal spread is maximum 3-4 cm away from the lower margin of the tumor. This observation led to the development of the technique called partial mesorectal excision (PME). TME has become unnecessary for the upper rectal tumors. Many authors have agreed that in upper rectal tumors, a resection 5 cm below the lesion is enough in the rectum and mesorectum. Several studies on this issue have reported similar results between the treatment of upper rectal carcinomas with PME and TME [9]. In a resected tumor material,18-21 lymph nodes can be extracted in a well -prepared TME specimen.In the lymphatic assessment of a TMEperformed rectal tumor, assessment of "7-14" lymph nodes in the average is recommended [10].

CONCLUSION

Symtoms, clinic, diagnosis and surgical treatment of MCR is same to RC. TME should implementation in surgical treatment and average 10 lymph nodes should be removed, radian margin is necessary >1cm.

Conflict of Interest

There is no conflict of interest between the authors. The financial support has not been taken.

REFERENCES

- 1. Bosman FT, Carneiro F, Hruban RH, Theise ND. WHO classification of tumours of the digestive system. World Health Organization; 2010.
- 2. Fleming M, Ravula S, Tatishchev SF, Wang HL. Colorectal carcinoma: pathologic aspects. Journal of gastrointestinal oncology. 2012 Sep;3(3):153.

- 3. Jessurun J, Romero-Guadarrama M, Manivel JC. Medullary adenocarcinoma of the colon: clinicopathologic study of 11 cases. Human pathology. 1999 Jul 1;30(7):843-8.
- Søreide O, Norstein J, Fielding LP, Silen W. International standardization and documentation of the treatment of rectal cancer. InRectal Cancer Surgery 1997 (pp. 405-445). Springer, Berlin, Heidelberg.
- Thirunavukarasu P, Sathaiah M, Singla S, Sukumar S, Karunamurthy A, Pragatheeshwar KD, Lee KK, Zeh H, Kane KM, Bartlett DL. Medullary carcinoma of the large intestine: a population based analysis. International journal of oncology. 2010 Oct 1;37(4):901-7.
- 6. Tsuchiya S, Ohki S. Radical surgery for rectal cancer with preservation of pelvic autonomic nerves. Taipei: Republic of China Surgical Society. 1992.
- Sterk P, Keller L, Jochims H, Klein P, Stelzner F, Bruch H, Markert U. Lymphoscintigraphy in patients with primary rectal cancer: the role of total mesorectal excision for primary rectal cancer–a lymphoscintigraphic study. International journal of colorectal disease. 2002 May 1;17(3):137-42.
- Quirke P, Dixon MF, Durdey P, Williams NS. Local recurrence of rectal adenocarcinoma due to inadequate surgical resection: histopathological study of lateral tumour spread and surgical excision. The Lancet. 1986 Nov 1;328(8514):996-9.
- Lopez-Kostner F, Lavery IC, Hool GR, Rybicki LA, Fazio VW. Total mesorectal excision is not necessary for cancers of the upper rectum. Surgery. 1998 Oct 1;124(4):612-8.
- 10. Quirke P, Williams GT, Ectors N, Ensari A, Piard F, Nagtegaal I. The future of the TNM staging system in colorectal cancer: time for a debate?. The lancet oncology. 2007 Jul 1;8(7):651-7.