

Synchronous Primary Anorectal Melanoma, Sigmoid Multiple Early Cancers and Descending Adenocarcinoma: A Case Report

Ruiyin Ge¹, Aixia Gong¹, Kang Sun¹, Jingwen Zhang¹, Jing Ma¹

¹Digestive Endoscopy of the First Affiliated Hospital of Dalian Medical University, Dalian, Liaoning, China

Multiple colorectal cancers are extremely rare, few cases can be searched in the literature. Our group only found 6 cases published. We report a case where 3 diseases coexisted summarize the currently available literature. A 75-year-old man presented with changes in his bowel habits and hematochezia. After a colonoscopy with biopsies in a community hospital, he was diagnosed with a descending adenocarcinoma patient. To get further treatment, he came to our hospital. Colonoscopy revealed ulcerative lesions in the descending colon, 2 polypoid lesions in the sigmoid colon, and a protruded lesions in the anorectal. The ulcerative lesions were already diagnosed as adenocarcinoma at the descending colon. So biopsies were taken in the anorectal region, which revealed poorly differentiated melanoma of the anorectal. Computed tomography did not find distant metastases and regional lymphadenopathy. A laparoscopic resection was undertaken to relieve his symptoms and improve the quality of life. The mass showed descending adenocarcinoma, sigmoid multiple early cancers, and poorly differentiated melanoma of the anorectal region. What we can learn is that endoscopy doctors should always be aware of the possibilities of multiple primary cancers for this is important to the treatment and prognosis of patients, standard colonoscopy examination is necessary and returning a enteroscope from cecum should be more than 8 minutes.

Key words: Colorectal melanoma – Adenocarcinoma – Synchronous tumors – Multiple tumors

A norectal melanoma is a rare cancer with a poor prognosis, which accounts for less than 1% of all melanomas and less than 3% of all anorectal cancers.^{1,2} The incidence of multiple primary can-

cers identified in the colon and rectum is estimated to be about 2% to 11%.⁷ Multiple colorectal cancers are extremely rare, few cases can be searched in the literature. Our group only found 6 cases published.

Corresponding author: Aixia Gong, PhD, Department of Digestive Endoscopy in the First Affiliated Hospital of Dalian Medical University, Dalian, Liaoning, China.

Tel.: +86041183635963-3250; Fax: 0411-83622844; E-mail: gongaixiadmu@163.com

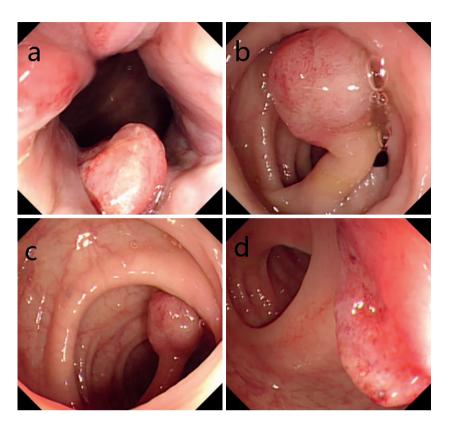


Fig. 1 (a) Anorectal melanoma, (b, c) sigmoid multiple early cancers, and (d) descending adenocarcinoma.

We report a case of synchronous primary anorectal melanoma, sigmoid multiple early cancers, and descending adenocarcinoma.

Case Report

A 75-year-old man presented on April 1, 2016, with changes in his bowel habits and hematochezia. After a colonoscopy with biopsies in a community hospital, he was diagnosed with descending adenocarcinoma. To get further treatment, he came to our hospital on April 8, 2016. He denied weight loss during the past year. His past medical history included hypertension and coronary heart disease. He denied any family history of colorectal cancers. He denied history of smoking and drinking.

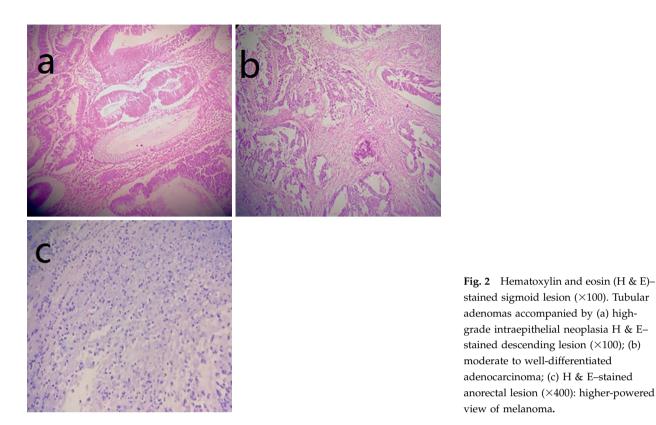
He underwent another colonoscopy on April 14, 2016 in our hospital, which revealed ulcerative lesions in the descending colon, 2 polypoid lesions in the sigmoid colon, and protruded lesions in the anorectal region (Fig. 1). Biopsies were taken from the anorectal region, which revealed poorly differentiated melanoma of the anorectal region (Fig. 2). Computed tomography of the abdomen showed no metastasis.

He subsequently underwent an extended abdominoperineal resection (APR) with the help of laparoscope to relieve his symptoms and improve the quality of life. After operation, the anorectal mass was found to be approximately $1.5 \times 1.2 \times 0.6$ cm, with some invasion into the muscular layer and surrounding mucosa, but without invasion into the vessel and nerve. The sigmoid mass was found as 2 knots in tubular adenomas accompanied by highgrade intraepithelial neoplasia approximately 1.2 and 1.5 cm and did not invade the adjacent structures. The descending mass was approximately 0.6×0.5 cm and did not involve or invade the adjacent structures.

The mass showed moderate to well-differentiated adenocarcinoma of the descending, tubular adenomas accompanied by high grade intraepithelial neoplasia of the sigmoid and anorectal malignant melanoma (Fig. 2), no lymph node involvement. Immunohistochemistry performed on the anorectal tumor showed positive staining with anti-S-100 protein (S100), Vimentin, part of human melanoma black (HMB45) and antibodies to melan A.

Postoperatively, the patient's recovery was uneventful. He is well now. Computed tomography of

GF



the abdomen and the mass showed no metastasis, so he did not accepted further treatment.

Discussion

Anorectal malignant melanoma (AMM) is an extremely rare cancer, which was first reported by Moore DW in 1857.^{2,3} AMM is mostly seen in the sixth or seventh decade of life, with a female predominance, and rectal bleeding is the most common symptom.^{3,4,5} Changes in bowel movements, rectal pain, and inguinal mass may also be present.³ Early diagnosis and a tailored, multidisciplinary treatment plan would likely improve the treatment result of AMM.¹³ Differential diagnoses of anorectal melanoma include hemorrhoids, polyps, and other malignancies.³ Anti-S-100 protein (S100), human melanoma black (HMB-45), and antibodies to melan-A are the most common "melanocyte specific" stains used in the diagnosis of malignant melanoma.⁶

Surgical excision remains the cornerstone of therapy.¹² However, standard operative procedures related to the area of resection and lymph dissection have yet to be established.⁵ Wide local excision (WLE) and APR are 2 choices of operation. APR can reduce bleeding or colonic obstruction, resulting in

improved quality of life.^{1,3} However, neither WLE nor APR provides a survival benefit.^{1,3}

The mean survival time for anorectal malignant melanoma is 20 months with treatment, and disease-free survival of 6.7% to 12% at 5 years.^{1,11} The mean 5-year survival rate of both metastatic anorectal melanoma and colorectal cancer is poor, being 0% and 5.7%, respectively.^{1,11}

In conclusion, synchronous primary anorectal melanoma, sigmoid multiple early cancers and descending adenocarcinoma is rare. What we can learn is that endoscopy doctors should always be aware of the possibilities of multiple primary cancers for this is important to the treatment and prognosis of patients, standard colonoscopy examination is necessary and returning a enteroscope from the cecum should be more than 8 minutes. Large-scale prospective clinical trials need to be done to find standard operative procedures for AMM.

Acknowledgments

Declaration of Conflicting Interests: This article has not been published elsewhere in whole or in part. All authors have read and approved the content, and agree to submit for consideration for publication in the journal. There are no any ethical/legal conflicts involved in the article.

The equipment, drugs and all of these were supported by the first affiliated hospital of Dalian Medical University.

References

- Lim A, Grant B, Avramovic J, Ho YH, Wallace C. Synchronous primary anorectal melanoma and sigmoid adenocarcinoma: a case report. *Int Surg* 2015;**100**(5):814–817
- Miguel I, Freire J, Passos MJ, Moreira A. Anorectal malignant melanoma: retrospective analysis of management and outcome in a single Portuguese Institution. *Med Oncol* 2015;**32**(1): 445
- Buissin D, Sterle A, Schmiegelow P, Wassenberg D, Ambe PC. Primary anorectal malignant melanoma: a rare but aggressive tumor: report of a case. *World J Surg Oncol* 2015; 30;13:12
- Ilardi G, Caroppo D, Varricchio S, Vita G, Di Lorenzo P, Insabato L *et al.* Anal melanoma with neuroendocrine differentiation: report of a case. *Int J Surg Pathol* 2015;23(4): 329–332
- Arakawa K, Kiyomatsu T, Ishihara S, Ikermura M, Hojo D, Takiyama H *et al.* A case report of anorectal malignant melanoma with mucosal skipped lesion. *Int J Surg Case Rep* 2016;24:206–210
- Gavriilidis P, Moula E, Nikolaidou A. Primary rectal malignant melanoma-case report. *Hippokratia* 2013;17(4):380–381
- Teke Z, Ozogul YB, Aydog G, Dalgic T, Bostanci EB, Akoglu M. Mutiple synchronous anorectal malignant melanoma

coexisting with adenoma of the sigmoid colon. *Indian J Surg* 2013;75(2):164–166

- Delikaris P, Koutmeridis D, Tsonis G, Asimaki A, Mouratidou D. Synchronous anorectal malignant melanoma and rectal adenocarcinoma: report of a case. *Dis Colon Rectum* 1997;40(1): 105–108
- Dias AR, Pinto RA, Mory E, Silva IC, Siqueira SA, Nahas SC *et al*. Synchronous collision malignant melanoma and adenocarcinoma of the rectum. *Tech Coloproctol* 2010;14(2):181–184
- Secco GB, Ferrari C, Pugliese V, Lapertosa G, Anfossi A. Anorectal malignant melanoma: a case in the anorectal junction synchronous with adenocarcinoma of the sigmoid. *Minerva Chir* 1981;36(9):615–620
- Balicevic D, Tomic K, Bekavac-Beslin M, Kovacevic I, Mijic A, Belicza M et al. Synchronous anorectal melanoma. World J Gastroenterol 2006;12(21):3453–3455
- Saraswat B, Purohit R, Singh A, Yadav R. Primary anal malignant melanoma: a case report. *Int Surg J* 2015;2(2):304– 307
- Nam S, Kim CW, Baek SJ, Hur H, Min BS, Baik SH *et al*. The clinical features and optimal treatment of anorectal malignant melanoma. *Ann Surg Treat Res* 2014;87(3):113–117

© 2017 Gong et al.; licensee The International College of Surgeons. This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-commercial License which permits use, distribution, and reproduction in any medium, provided the original work is properly cited, the use is noncommercial and is otherwise in compliance with the license. See: http://creativecommons.org/licenses/by-nc/3.0