

World Journal of *Clinical Cases*

World J Clin Cases 2022 May 26; 10(15): 4713-5123



EDITORIAL

- 4713 Diet and intestinal bacterial overgrowth: Is there evidence?
Souza C, Rocha R, Cotrim HP

MINIREVIEWS

- 4717 Definition and classification of acute-on-chronic liver diseases
Zhang YY, Meng ZJ
- 4726 Management of neurosurgical patients during coronavirus disease 2019 pandemics: The Ljubljana, Slovenia experience
Velnar T, Bosnjak R

ORIGINAL ARTICLE**Clinical and Translational Research**

- 4737 Glycolytic and fatty acid oxidation genes affect the treatment and prognosis of liver cancer
Zou JY, Huang YJ, He J, Tang ZX, Qin L
- 4761 Detection of a novel panel of 24 genes with high frequencies of mutation in gastric cancer based on next-generation sequencing
Zeng HH, Yang Z, Qiu YB, Bashir S, Li Y, Xu M

Case Control Study

- 4776 Outcomes of cervical degenerative disc disease treated by anterior cervical discectomy and fusion with self-locking fusion cage
Zhang B, Jiang YZ, Song QP, An Y
- 4785 Impact of COVID-19 pandemic on clinicopathological features of transplant recipients with hepatocellular carcinoma: A case-control study
Akbulut S, Sahin TT, Ince V, Yilmaz S

Retrospective Study

- 4799 Risk factors and optimal predictive scoring system of mortality for children with acute paraquat poisoning
Song Y, Wang H, Tao YH
- 4810 Application effect of thoracoscopic tricuspid valvuloplasty in geriatric patients with tricuspid valve disease
Jiang W, Long XM, Wei KQ, Li SC, Zhang Z, He BF, Li H
- 4818 Endoscopic ultrasonography in the evaluation of condition and prognosis of ulcerative colitis
Jin RF, Chen YM, Chen RP, Ye HJ

- 4827 Dynamic interaction nursing intervention on functional rehabilitation and self-care ability of patients after aneurysm surgery

Xie YE, Huang WC, Li YP, Deng JH, Huang JT

Clinical Trials Study

- 4836 Validations of new cut-offs for surgical drains management and use of computerized tomography scan after pancreatoduodenectomy: The DALCUT trial

Caputo D, Coppola A, La Vaccara V, Passa R, Carbone L, Ciccozzi M, Angeletti S, Coppola R

Observational Study

- 4843 Psychosocial adaptation and influencing factors among patients with chemotherapy-induced peripheral neuropathy

Zhou X, Wang DY, Ding CY, Liu H, Sun ZQ

META-ANALYSIS

- 4856 Outcome of the efficacy of Chinese herbal medicine for functional constipation: A systematic review and meta-analysis

Lyu Z, Fan Y, Bai Y, Liu T, Zhong LL, Liang HF

CASE REPORT

- 4878 Familial gastrointestinal stromal tumors with *KIT* germline mutation in a Chinese family: A case report

Yuan W, Huang W, Ren L, Xu C, Luan LJ, Huang J, Xue AW, Fang Y, Gao XD, Shen KT, Lv JH, Hou YY

- 4886 Nonfunctional pancreatic neuroendocrine tumours misdiagnosed as autoimmune pancreatitis: A case report and review of literature

Lin ZQ, Li X, Yang Y, Wang Y, Zhang XY, Zhang XX, Guo J

- 4895 Sudden deafness as a prodrome of cerebellar artery infarction: Three case reports

Li BL, Xu JY, Lin S

- 4904 Importance of abdominal X-ray to confirm the position of levonorgestrel-releasing intrauterine system: A case report

Maebayashi A, Kato K, Hayashi N, Nagaishi M, Kawana K

- 4911 Bedside ultrasonic localization of the nasogastric tube in a patient with severe COVID-19: A case report

Zhu XJ, Liu SX, Li QT, Jiang YJ

- 4917 Paradoxical herniation after decompressive craniectomy provoked by mannitol: A case report

Du C, Tang HJ, Fan SM

- 4923 Targeted next-generation sequencing identifies a novel nonsense mutation in ANK1 for hereditary spherocytosis: A case report

Fu P, Jiao YY, Chen K, Shao JB, Liao XL, Yang JW, Jiang SY

- 4929 Nonfunctional bladder paraganglioma misdiagnosed as hemangioma: A case report

Chen J, Yang HF

- 4935** Special type of Wernekink syndrome in midbrain infarction: Four case reports
Yang YZ, Hu WX, Zhai HJ
- 4942** Primary extraskeletal Ewing's sarcoma of the lumbar nerve root: A case report
Lei LH, Li F, Wu T
- 4949** Yellow nail syndrome accompanied by minimal-change nephrotic syndrome: A case report
Zhang YN, Wang MH, Yu WC, Cheng W, Cong JP, Huang XP, Wang FF
- 4957** Total femur replacement with 18 years of follow-up: A case report
Yang YH, Chen JX, Chen QY, Wang Y, Zhou YB, Wang HW, Yuan T, Sun HP, Xie L, Yao ZH, Yang ZZ
- 4964** Male metaplastic breast cancer with poor prognosis: A case report
Kim HY, Lee S, Kim DI, Jung CS, Kim JY, Nam KJ, Choo KS, Jung YJ
- 4971** CD8-positive indolent T-Cell lymphoproliferative disorder of the gastrointestinal tract: A case report and review of literature
Weng CY, Ye C, Fan YH, Lv B, Zhang CL, Li M
- 4985** Bone flare after initiation of novel hormonal therapy in patients with metastatic hormone-sensitive prostate cancer: A case report
Li KH, Du YC, Yang DY, Yu XY, Zhang XP, Li YX, Qiao L
- 4991** Postoperative infection of the skull base surgical site due to suppurative parotitis: A case report
Zhao Y, Zhao Y, Zhang LQ, Feng GD
- 4998** Blunt aortic injury-traumatic aortic isthmus pseudoaneurysm with right iliac artery dissection aneurysm: A case report
Fang XX, Wu XH, Chen XF
- 5005** Extensive complex thoracoabdominal aortic aneurysm salvaged by surgical graft providing landing zone for endovascular graft: A case report
Jang AY, Oh PC, Kang JM, Park CH, Kang WC
- 5012** Gastric heterotopia of colon found cancer workup in liver abscess: A case report
Park JG, Suh JI, Kim YU
- 5018** Clinical manifestations and gene analysis of Hutchinson-Gilford progeria syndrome: A case report
Zhang SL, Lin SZ, Zhou YQ, Wang WQ, Li JY, Wang C, Pang QM
- 5025** Neurocutaneous melanosis with an intracranial cystic-solid meningeal melanoma in an adult: A case report and review of literature
Liu BC, Wang YB, Liu Z, Jiao Y, Zhang XF
- 5036** Metastasis of liver cancer to the thyroid after surgery: A case report
Zhong HC, Sun ZW, Cao GH, Zhao W, Ma K, Zhang BY, Feng YJ

- 5042** Spontaneous liver rupture following SARS-CoV-2 infection in late pregnancy: A case report
Ambrož R, Stašek M, Molnár J, Špička P, Klos D, Hambálek J, Skanderová D
- 5051** Carotid blowout syndrome caused by chronic infection: A case report
Xie TH, Zhao WJ, Li XL, Hou Y, Wang X, Zhang J, An XH, Liu LT
- 5057** Is repeat wide excision plus radiotherapy of localized rectal melanoma another choice before abdominoperineal resection? A case report
Chiu HT, Pu TW, Yen H, Liu T, Wen CC
- 5064** Metaplastic breast cancer with chondrosarcomatous differentiation combined with concurrent bilateral breast cancer: A case report
Yang SY, Li Y, Nie JY, Yang ST, Yang XJ, Wang MH, Zhang J
- 5072** Rare solitary splenic metastasis from a thymic carcinoma detected on fluorodeoxyglucose-positron emission tomography: A case report
Tsai YH, Lin KH, Huang TW
- 5077** Type A aortic dissection following heart transplantation: A case report
Zeng Z, Yang LJ, Zhang C, Xu F
- 5082** Catheter-related infections caused by *Mycobacterium abscessus* in a patient with motor neurone disease: A case report
Pan SF, Zhang YY, Wang XZ, Sun JJ, Song SL, Tang YR, Wang JL
- 5088** Clear aligner treatment for a four-year-old patient with anterior cross-bite and facial asymmetry: A case report
Zou YR, Gan ZQ, Zhao LX
- 5097** Knot impingement after arthroscopic rotator cuff repair mimicking infection: A case report
Kim DH, Jeon JH, Choi BC, Cho CH
- 5103** Solitary primary pulmonary synovial sarcoma: A case report
He WW, Huang ZX, Wang WJ, Li YL, Xia QY, Qiu YB, Shi Y, Sun HM
- 5111** Anesthetic management for intraoperative acute pulmonary embolism during inferior vena cava tumor thrombus surgery: A case report
Hsu PY, Wu EB
- 5119** Delayed diagnosis of arytenoid cartilage dislocation after tracheal intubation in the intensive care unit: A case report
Yan WQ, Li C, Chen Z

ABOUT COVER

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The primary aim of *World Journal of Clinical Cases* (*WJCC*, *World J Clin Cases*) is to provide scholars and readers from various fields of clinical medicine with a platform to publish high-quality clinical research articles and communicate their research findings online.

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Is repeat wide excision plus radiotherapy of localized rectal melanoma another choice before abdominoperineal resection? A case report

Hao-Tse Chiu, Ta-Wei Pu, Hao Yen, Tung Liu, Chia-Cheng Wen

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Abstract

BACKGROUND

Rectal melanoma is an uncommon neoplasm that accounts for approximately 1 percent of rectal cancer cases. Abdominoperineal resection was regarded as the radical procedure for disease control. Nevertheless, it led to more postoperative complications than sphincter-sparing wide local excision (WLE) and reduced the patient's quality of life (QOL) owing to creation of colostomy. Therefore, in this study, WLE, radiotherapy (RT), and a second WLE were conducted on a patient who had been diagnosed with localized rectal melanoma.

CASE SUMMARY

The patient was a 79-year-old woman who had been experiencing anal pain and bloody stool for 1 mo. Colonoscopy, magnetic resonance imaging, positron emission tomography-computed tomography, and histological analysis of tissue biopsy using the histological markers Melan-A (+), S-100 (+), and Ki-67 (+, 50%) lead to the diagnosis of localized rectal melanoma. The patient had initially undergone WLE to resolve problem of anal bleeding, followed by RT to treat the residual lesion with partial response. Subsequently, the residual lesion was removed with margin-free resection by the second WLE. The patient's postoperative course was smooth and uneventful. During the 2-year follow-up, no

local recurrence was observed. Additionally, a good functional outcome and improved QOL were reported.

CONCLUSION

Combining WLE, RT, and repeat WLE is proposed as a viable alternative for treating rectal melanoma accompanied by bleeding symptoms that cannot be completely resected at the beginning.

Key Words: Sphincter-sparing local wide excision; Radiotherapy; Rectal melanoma; Case report

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Core Tip: Combining repeat sphincter-sparing wide excision and radiotherapy is proposed as a viable alternative to achieve negative resection margins, a lowered local recurrence, better functional outcomes, and quality of life using the least radical procedure in patients diagnosed with localized rectal melanoma.

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INTRODUCTION

Rectal melanoma is a rare disease that occurs in the rectal mucosa. In some cases, the rectal melanoma lesion can be pigmented. It occurs in approximately 1 percent of rectal cancer cases[1], with the poor outcome being recorded regularly, which is commonly accompanied by implantation above the dentate line in elder female. Bloody stool, rectorrhagia, and proctalgia are common symptoms. Mostly, the disease is initially misdiagnosed as hemorrhoids or polyp. However, most patients would have experienced nodal metastasis at diagnosis. In addition, it is estimated that 30% of the patients would have experienced distal organ metastasis[2]. Macroscopically, the tumor appears as a polypoid intraluminal lesion or a mild peripheral wall thickening. In the scan of magnetic resonance imaging (MRI), rectal melanoma presents as a polypoid lesion with hyperintense on T1-weighted scan and hypo- or mixed intense on T2-weighted scan with moderate to strong enhancement and diffusion limitations being recorded. In contrast, positron emission tomography-computed tomography (PET-CT) is a good tool for tumor staging due to its high sensitivity and specificity. S-100 and HMB-45, as the histological markers, which have frequently been identified microscopically, have also been proposed to help with diagnosis. Moreover, no strong evidence exists in the National Clinical Cancer Network guidelines on the diagnosis of rectal melanoma owing to paucity of the available data. As a result, treatment is highly variable, with no consensus being reached to date. Radical procedure with abdominoperineal resection (APR) is the standard method due to its better local control rate than wide local excision (WLE) before[3, 4]. However, it led to more operative complications and lower quality of life (QOL) owing to creation of colostomy. Therefore, WLE has been regarded as an alternative option for better functional performance management to decrease the surgery-related morbidity experienced with APR[5]. Nevertheless, there are many disadvantages of the clinical use of WLE, particularly when the tumor size is too large to be completely resected initially. The incidence of local recurrence after surgery has been reported to be high[6,7]. This consequently compromises the goal of performing limited surgeries. Rectal melanoma was known as a radio-resistant neoplasm previously. Since the late 1980s, Kelly *et al*[8] presented that combined WLE and post-operative radiotherapy (RT) can reduce the incidence of local recurrence in patients with localized anorectal melanoma[8]. Hence, an adequate surgical approach is proposed in this study to minimize operative complications, achieve R0 resection, lower regional recurrence, maintain functional outcomes, and improve the patient's QOL. Functional outcomes regarding the frequency of bowel movements, strained defecation, urgency, and perianal irritation are presented in [Supplementary Table 1](#). QOL was also evaluated using the 36-Item Short Form Health Survey (SF-36) ([Supplementary Table 2](#))[9]. Thus, this study combined WLE, RT, and a second WLE as an appropriate strategy to balance functional outcomes and control disease symptoms in an elderly patient diagnosed with localized rectal melanoma.

CASE PRESENTATION

Chief complaints

The patient was a 79-year-old woman who presented with perianal pains and episodes of bloody stool for 1 mo.

History of present illness

The patient reported a 1-mo history of perianal pains and intermittent hematochezia for 1 mo, but denied complaining abdominal discomfort and no body weight loss over the past month.

History of past illness

The patient denied the past medical and surgical histories.

Personal and family history

The patient denied the personal and family histories.

Physical examination

Rectal examinations revealed a polypoid mass over the lower rectum.

Laboratory examinations

Serum tumor markers, including carcinoembryonic antigen, cancer antigen-125 and cancer antigen-199 revealed in normal ranges. In addition, normal liver and kidney function were revealed. Mild anemia with hemoglobin of 10.1 g/dL (normal range: 12-16) was revealed.

Imaging examinations

Colonoscopy showed a polypoid lesion which is approximately 6 cm in diameter and 5 cm above the anal verge (Figure 1A). Additionally, the pelvic MRI showed the lobulated mixed-signal intensity lesion at the rectum on the T2-weighted scan (Figure 1B). Therefore, biopsy *via* colonoscopy was performed and the malignant melanoma was diagnosed by histopathology. The patient's immunohistochemistry tumor profile was characteristic as Melan-A (+), S-100 (+), and ki-67 (+, 50%; Figure 2), whereas two intense FDG avidity was showed at the rectum [standardized uptake value (SUV) = 11.3 at 9 o'clock and 16.1 at 5 o'clock], including a FDG avidity at the presacral region (SUV_{max} = 4.6), which was proposed as a suspicious nodal metastasis by PET-CT image (Figure 3).

FINAL DIAGNOSIS

The final diagnosis was confirmed to be primary rectal melanoma with suspicious nodal metastasis.

TREATMENT

Wide local excision was performed for the first time (Figure 4). For symptom relief, the team combined the excision procedure with adjuvant RT. Follow-up pelvic CT showed a striking shrinkage in the residue lesion compared with the previous image.

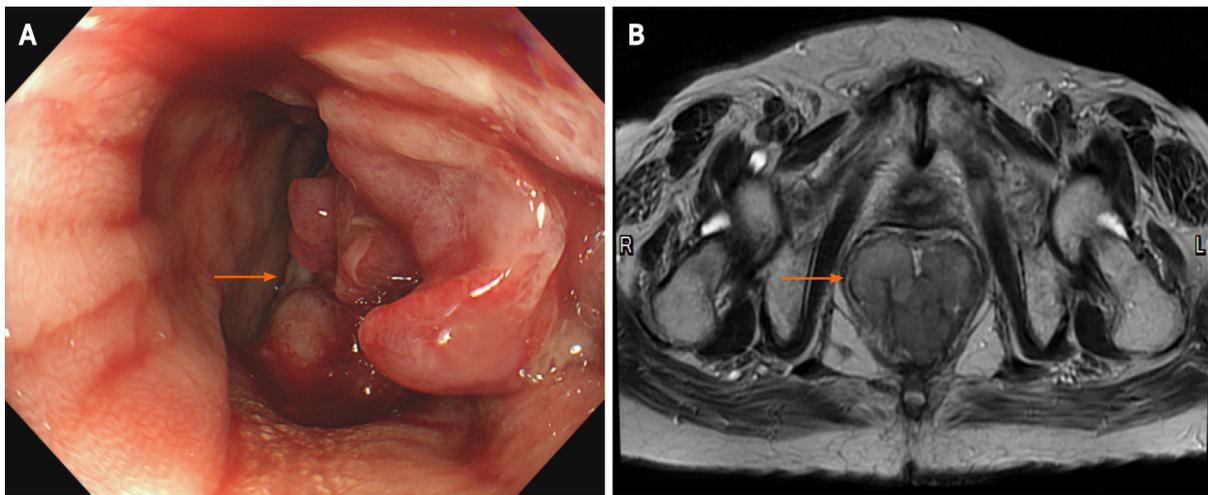
Subsequently, the residual lesion was removed with margin-free resection by transanal WLE 3 mo later.

OUTCOME AND FOLLOW-UP

Afterward, the patient underwent regular clinical examinations and imaging scans (CT or colonoscopy) (Figure 5). Currently, she is experiencing a 2-year relapse-free postsurgery period and satisfies all indicators of functional quality and QOL (Supplementary Tables 1 and 2).

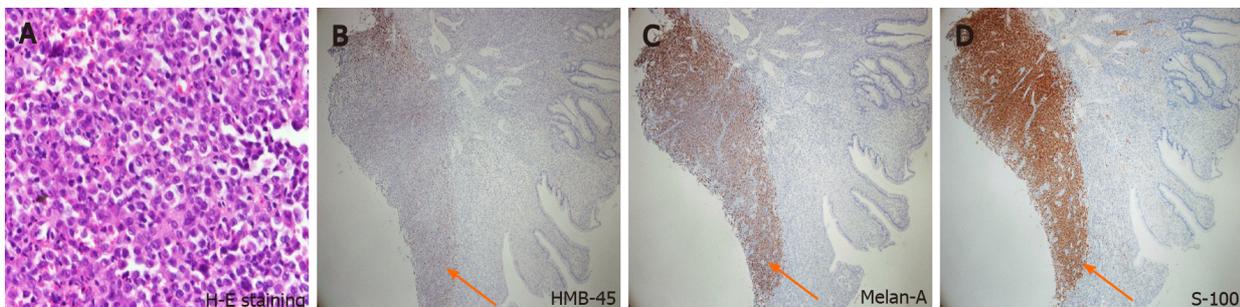
DISCUSSION

Rectal melanoma is a rare type of malignant melanoma. Owing to its aggressiveness, it has a low median survival rate, poor overall 5-year survival rate, and shorter disease-free survival period[3,10]. However, controversy about the best primary surgical strategy for patients with rectal melanoma exists, and the rarity of this condition, including the available quality evidence on this condition, partially



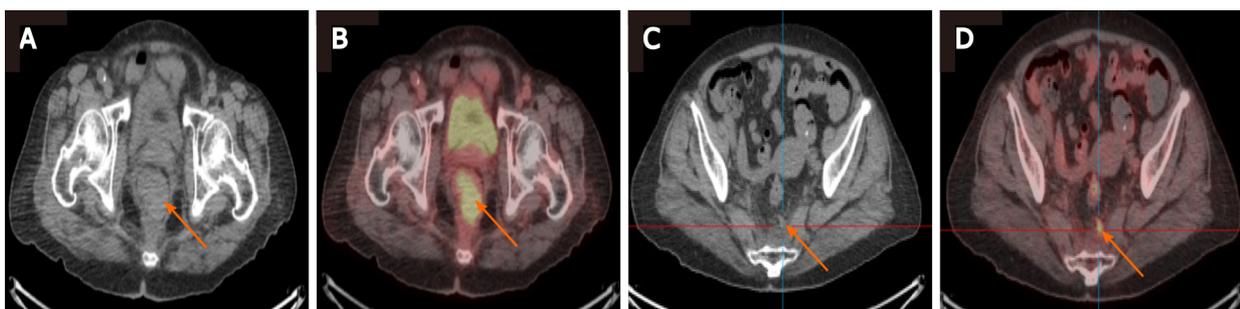
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Figure 1 Initial colonoscopy and magnetic resonance imaging. A: Colonoscopy showed a polypoid mass about 6 cm in size at rectum; B: Magnetic resonance imaging showed a lobulated mixed-signal intensity mass at the rectum (5.5 cm × 4.8 cm in size, 3.5 cm above the anal verge) on the T2-weighted axial image.



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Figure 2 Histology image of the biopsied tissues. A: Neoplastic cells showed epithelioid morphology (hematoxylin-eosin staining, 400 ×); B: Neoplastic cells showed focally positive staining for HMB-45 (immunohistochemistry staining, 40 ×); C: Neoplastic cells showed positive staining for Melan-A (immunohistochemistry staining, 40 ×); D: Neoplastic cells showed positive staining for S-100 (immunohistochemistry staining, 40 ×).



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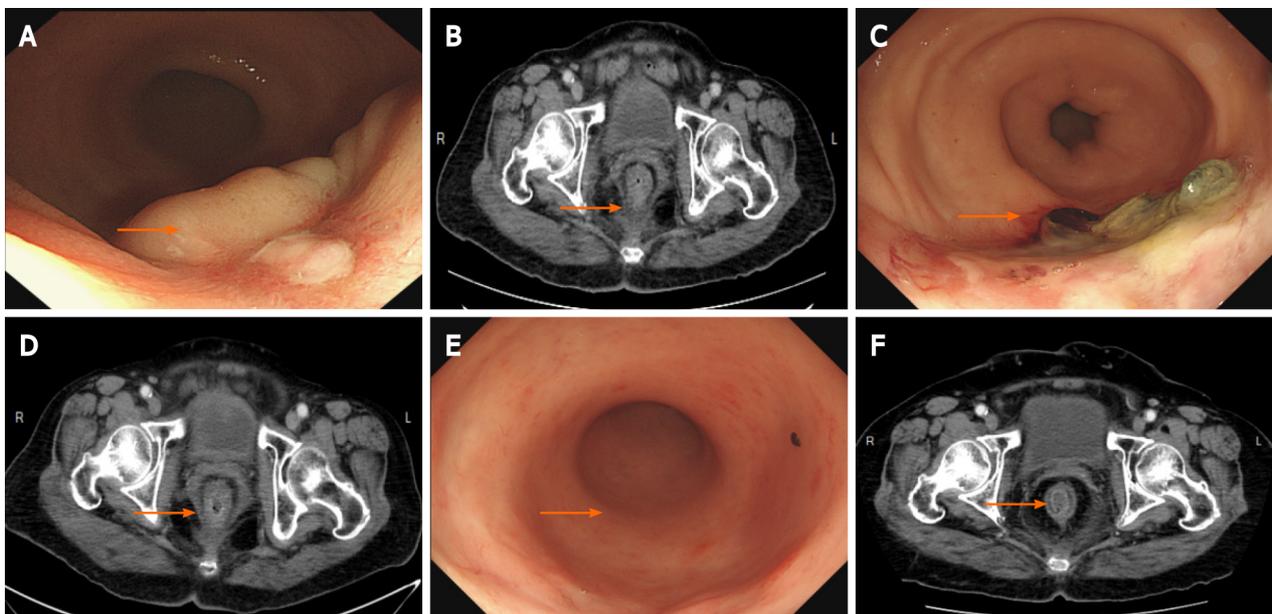
Figure 3 Computed tomography and positron emission tomography/computed tomography for pelvic imaging in anorectal melanoma. A and B: The (A) axial computed tomography (CT) and (B) positron emission tomography/CT (PET/CT) showed Intense FDG-avidity over the rectum, suspicious for malignancy; C and D: The (C) axial CT and (D) PET/CT showed one mild FDG-avidity over the pre-sacral space, suspicious nodal metastasis.

limits consensus. Available evidence shows that the use of radical surgery in the form of APR significantly improved the survival rate compared with partial resection or WLE[5,11]. APR is also proposed to reduce the local recurrence rate, but it has a high morbidity rate with functional limitations, thereby lowering the patient’s QOL[12]. As a result, WLE has been selected as the treatment strategy for most patients. If local recurrence occurs, repeated WLE or APR can be used as salvage treatments. Nevertheless, previous studies have reported local recurrence rates after WLE of up to 50%. This high



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Figure 4 The first wide local excision was performed with snares, to cut off parts of the polypoid mass piece by piece until the protruding mass is resected.



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Figure 5 Following-up colonoscopy and computed tomography. A and B: The (A) colonoscopy and (B) computed tomography (CT) showed 1 mo after radiotherapy [before the second wide local excision (WLE)]; C and D: The (C) colonoscopy and (D) CT showed 3 mo after the second WLE; E and F: The (E) colonoscopy and (F) CT showed 2 yr after the second WLE.

recurrence rate has led some people to question whether WLE alone was sufficient to treat patients diagnosed with rectal melanoma[4,6]. Interestingly, the combination of WLE and adjuvant RT in recently published studies resulted in local recurrence rates of < 20%, demonstrating a substantial decrease in local recurrence rates, in addition to increased sphincter preservation and function[6]. Hence, despite the favorable local control rates, the overall prognosis of patients with anorectal melanoma remains extremely poor. In addition to distant recurrence, Nusrath *et al*[13] revealed that overall survival rate was related to multiple factor, including tumor size, poor pathological feature such as lymphovascular or perineural invasion, and margin-negative resection[13]. In this study, the patient presented with localized rectal melanoma that we were unable to completely resect at the beginning. Bleeding symptoms also accompanied her condition. As a treatment strategy, WLE was performed first to reduce tumor volume and relieve anal bleeding. Consequent treatment with RT led to substantial residual tumor shrinkage, which was followed by secondary WLE that achieved margin-negative resection without severe side effects in addition to a good postoperative functional outcome and QOL. Subsequently, SF-36 was supplemented (Supplementary Table 2) to assess QOL before and after WLE.

CONCLUSION

In summary, although no consensus exists on localized rectal melanoma treatments, the current study presented repeat WLE and RT as viable alternatives to achieve negative resection margins, lowered local recurrence, better functional outcomes, and QOL using the least radical procedure in patients diagnosed with localized rectal melanoma. Nevertheless, further studies should be presented to validate its feasibility.

FOOTNOTES

Author contributions: Chiu HT and Pu TW involved in study design; Yen H and Liu T participated in data collection; Pu TW involved in literature search; Chiu HT and Wen CC wrote the manuscript; all authors read and approved the final manuscript.

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REFERENCES

- 1 **Heyn J**, Placzek M, Ozimek A, Baumgaertner AK, Siebeck M, Volkenandt M. Malignant melanoma of the anal region. *Clin Exp Dermatol* 2007; **32**: 603-607 [PMID: 17376215 DOI: 10.1111/j.1365-2230.2007.02353.x]
- 2 **Ibnian AM**, Nagaraja V, Eslick GD, Kalantar JS. Rectal Melanoma with Multiple Metastases: A Rare and Aggressive Tumor. *Rare Cancers The* 2014; **2**: 11-16 [DOI: 10.1007/s40487-014-0004-1]
- 3 **Brady MS**, Kavolius JP, Quan SH. Anorectal melanoma. A 64-year experience at Memorial Sloan-Kettering Cancer Center. *Dis Colon Rectum* 1995; **38**: 146-151 [PMID: 7851168 DOI: 10.1007/bf02052442]
- 4 **Weyandt GH**, Eggert AO, Houf M, Raulf F, Bröcker EB, Becker JC. Anorectal melanoma: surgical management guidelines according to tumour thickness. *Br J Cancer* 2003; **89**: 2019-2022 [PMID: 14647131 DOI: 10.1038/sj.bjc.6601409]
- 5 **Zhang S**, Gao F, Wan D. Abdominoperineal resection or local excision? *Melanoma Res* 2010; **20**: 338-341 [PMID: 20414138 DOI: 10.1097/CMR.0b013e328339b159]
- 6 **Ballo MT**, Gershenwald JE, Zagars GK, Lee JE, Mansfield PF, Strom EA, Bedikian AY, Kim KB, Papadopoulos NE, Prieto VG, Ross MI. Sphincter-sparing local excision and adjuvant radiation for anal-rectal melanoma. *J Clin Oncol* 2002; **20**: 4555-4558 [PMID: 12454112 DOI: 10.1200/JCO.2002.03.002]
- 7 **Belli F**, Gallino GF, Lo Vullo S, Mariani L, Poiasina E, Leo E. Melanoma of the anorectal region: the experience of the National Cancer Institute of Milano. *Eur J Surg Oncol* 2009; **35**: 757-762 [PMID: 18602790 DOI: 10.1016/j.ejso.2008.05.001]
- 8 **Kelly P**, Zagars GK, Cormier JN, Ross MI, Guadagnolo BA. Sphincter-sparing local excision and hypofractionated radiation therapy for anorectal melanoma: a 20-year experience. *Cancer* 2011; **117**: 4747-4755 [PMID: 21446049 DOI: 10.1002/encr.26088]
- 9 **Lins L**, Carvalho FM. SF-36 total score as a single measure of health-related quality of life: Scoping review. *SAGE Open Med* 2016; **4**: 2050312116671725 [PMID: 27757230 DOI: 10.1177/2050312116671725]
- 10 **Ishizone S**, Koide N, Karasawa F, Akita N, Muranaka F, Uhara H, Miyagawa S. Surgical treatment for anorectal malignant melanoma: report of five cases and review of 79 Japanese cases. *Int J Colorectal Dis* 2008; **23**: 1257-1262 [PMID: 18602790]

18633625 DOI: 10.1007/s00384-008-0529-6]

- 11 **Yeh JJ**, Shia J, Hwu WJ, Busam KJ, Paty PB, Guillem JG, Coit DG, Wong WD, Weiser MR. The role of abdominoperineal resection as surgical therapy for anorectal melanoma. *Ann Surg* 2006; **244**: 1012-1017 [PMID: 17122627 DOI: 10.1097/01.sla.0000225114.56565.f9]
- 12 **Li Z**, Šandera P, Beer M, Weber M. A rare case of recurrent primary anorectal melanoma emphasizing the importance of postoperative follow-ups. *BMC Surg* 2020; **20**: 68 [PMID: 32264858 DOI: 10.1186/s12893-020-00727-6]
- 13 **Nusrath S**, Thammineedi SR, Patnaik SC, Raju KVVN, Pawar S, Goel V, Chavali RN, Murthy S. Anorectal Malignant Melanoma-Defining the Optimal Surgical Treatment and Prognostic Factors. *Indian J Surg Oncol* 2018; **9**: 519-523 [PMID: 30538382 DOI: 10.1007/s13193-018-0791-1]



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