International Journal of Research in Medical Sciences
Bhosale AM et al. Int J Res Med Sci. 2024 May;12(5):1724-1726
www.msjonline.org
pISSN 2320-6071 | eISSN 2320-6012

DOI: https://dx.doi.org/10.18203/2320-6012.ijrms20241264

Case Report

Anal mucosal melanoma presenting as per rectal bleed: a case report

Aditya M. Bhosale*, Siddhant Shrotriya, Suresh Naik, Bahar Kulkarni

Department of Surgery, Kashibai Navale Medical College and Hospital, Pune, Maharashtra, India

Received: 05 January 2024
Revised: 11 March 2024
Accepted: 28 March 2024

***Correspondence:**
Dr. Aditya M. Bhosale,
E-mail: 1adityabhosalel@gmail.com

ABSTRACT

Anorectal mucosal melanoma is a rare, malignant and aggressive tumor that usually presents late. It primarily arises from the melanocytes but can also arise from the mucosal surface. It also carries poor survival rates. Early diagnosis of the disease and prompt treatment is necessary. Overall 5-year survival rate for anal melanoma is below 10%. We present a case of a 77 years old male patient who presented with chief complaints of per rectal bleeding and decreased appetite. Patient's symptoms were initially confused for benign conditions like hemorrhoids. He was diagnosed with anal mucosal melanoma on per rectal biopsy. Patient's radiological investigations including PET scan and MRCP were suggestive of liver and lung metastasis. In view of the advanced stage of the disease, the decision was taken to treat the patient conservatively. He was started on imatinib therapy and a regular follow up was kept and palliative care was provided.

Keywords: Anal mucosal melanoma, Melanoma, Anorectal diseases, Metastatic cancer, Anorectal malignancy

INTRODUCTION

Melanoma is a type of neoplasm that primarily arises from pigment producing cells called Melanocytes but it can also arise from mucosal surfaces of the oral cavity, pharynx, female genitalia, anorectum, proximal esophagus, and even eyes. Melanomas tend to metastasize often to distant organs and carry poor prognosis. The Anorectal manifestation is rare as it only compromises 1-2% of all melanomas. Overall 5-years survival rate in such cases is around 10%.

The anorectal melanomas often present as per rectal bleed along with some non-specific symptoms like loss of appetite. The symptoms of bleeding per rectum in such cases is often attributed to hemorrhoids. Hence the diagnosis is often delayed.[3,4] By the time patients are diagnosed the rare, aggressive disease presents with systemic metastasis. In cases of local isolated disease, wide local excision or abdominoperineal resection are the surgical procedures of choice.

CASE REPORT

A 77-year-old male patient reported to surgery OPD with complaints of per rectal bleed, peri-anal pain and passage of hard stools for 6 months. Patient also gave a history of loss of appetite. On general examination icterus was present. Proctoscopy revealed a polypoidal mass near anal verge at 9 'o' clock. There was no inguinal lymphadenopathy.

Radiological investigations

CECT of abdomen and pelvis revealed a solid mass (3.33.1×6.6 cm) in the left side of the rectum along with enlarged pelvic lymph nodes and multiple secondaries in the right lobe of liver. Whole body PET CT FDG avid

anorectal lesion with pelvic nodes, FDG avid nodule in lower lobe of left lung and liver deposits.

Due to deranged liver function tests an MRCP was done which showed multiple lesions in the entire liver and visualized lower lobe of left lung. Mild mass effect in portal region with effacement of right, left, and common hepatic duct without evidence of intra hepatic biliary radicle dilatation.

Histopathological findings

Per rectal biopsy of the mass was compatible with anorectal melanoma (ARM).

Gastroenterologist, oncologist and oncosurgeon references were taken. Because of the advanced stage of the disease with liver metastasis, the patient was not considered a suitable candidate for immunotherapy and surgery. Patient was started on capsule imatinib therapy daily. A regular follow up was kept. Blood investigations including liver function tests, hemogram were monitored. Palliative care was provided.

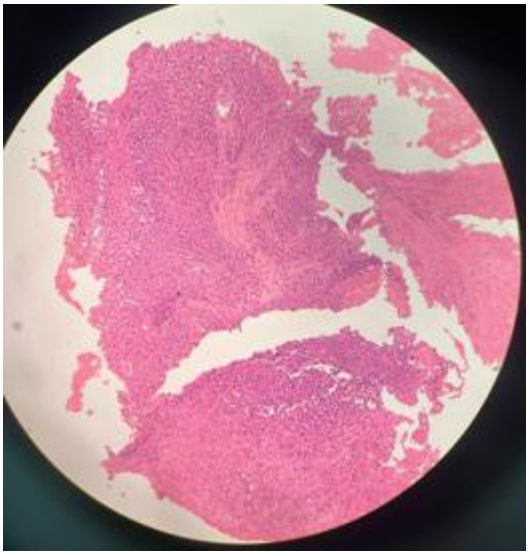

Figure 1: Tumor cells invading the muscles of the anal canal.

DISCUSSION

Origin and diagnosis

The dentate line, the line which divides the upper and the lower anal canal is defined by the junction between the endodermal and ectodermal parts. At this line, the columnar epithelium in the upper anal canal changes into the stratified epithelium in the lower. Melanocytes are present in the squamous zone and in the transitional zone. Their origin is from the embryonic ectoderm cells called neural crest cells that migrate to the distal ileum through the umbilical-mesenteric canal. ARM originates from melanocytes mostly near the area of the dentate line and penetrates the distal rectal mucosa.[1,5]

Diagnosis of ARM is difficult because of atypical signs which can be confused with bleeding hemorrhoids.[6]

Histology

Histology and immunohistochemistry are used for diagnosis of melanoma. Histological examination describes the pigmented lesions based on the presence and location of atypical melanocytes. Immunohistochemical studies are positive for protein S-100, melanoma antigen HMB-45, and vimentin.[7]

Staging and prognosis

The staging of ARM differs from the cutaneous melanoma. Most researchers used the clinical anorectal staging with (a) stage I: local disease, (b) stage II: a local disease with positive regional lymph nodes, and (C) stage III: distant metastasis.

Treatment

Management of ARM can include surgery, radiotherapy, chemotherapy, and target therapy. Mucosal resection (EMR) can be performed with long-term survival achieved in some cases (>6 years). Although conventional abdominoperineal resection is considered the main option for local region treatment with long-term survival, there is no significant benefit against wide local excision.[1,8] Some research showed the safety resection margin in wide local excision is 1-2 cm surrounding the tumor. In tumor thickness less than 1 mm, the local margin with sphincter-saving excision is 1 cm, if the tumor thickness from 1-4 mm, the adequate margin is 2 cm, if the tumor thickness above 4 mm, a wide local excision doesn't seem to be the sufficient management for anorectal melanoma.[8-10] So, frozen biopsy during operation can be done to achieve a sufficient negative margin. Adjuvant therapies are effective for anorectal melanoma. Ramakrishnan et al showed the outcome of patients who have received wide local excision and radiotherapy is better than other groups.[9] In advanced diseases, adjuvant therapy had demonstrated a significant benefit of α-interferon upon relapse-free survival and overall survival.[1,11]

CONCLUSION

Anal melanoma presents with non-specific symptoms which makes its prompt and early diagnosis difficult as it can be mistaken for diseases like haemorrhoids. By the time patients are diagnosed, the disease has metastasized. Primary treatment of the disease is surgery. Distant metastasis has to be ruled out before considering the patient for surgery. In advanced non operable cases immunotherapy can be the mainstay of treatment. Anorectal melanomas carry high rates of mortality.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Chen H, Cai Y, Liu Y, He J, Hu Y, Xiao Q, et al. Incidence, Surgical Treatment, and Prognosis of Anorectal Melanoma From 1973 to 2011: A Population-Based SEER Analysis. Medicine (Baltimore). 2016;95(7):e2770.
2. Bullard KM, Tuttle TM, Rothenberger DA, Madoff RD, Baxter NN, Finne CO, et al. Surgical therapy for anorectal melanoma. J Am Coll Surg. 2003;196(2):206-11.
3. Malaguarnera G, Madeddu R, Catania VE, Bertino G, Morelli L, Perrotta RE, et al. Anorectal mucosal melanoma. Oncotarget. 2018;9(9):8785-800.
4. Menon H, Patel RR, Cushman TR, Amini A, Seyedin SN, Adams AC, et al. Management and outcomes of primary anorectal melanoma in the United States. Future Oncol. 2020;16(8):329-38.
5. Sadler TW. Digestive system. In: Sadler TW, eds. Langman's Med. 14th ed. Wolters Kluwer; 2018: 230-255.
6. Negbenebor NA, Feller E. A rare case of amelanotic anorectal melanoma. R I Med J. 2017;100(9):31-2.
7. Cruz GMG, Filho SAJ, Patrus G, Leite OSM, Silva IG, Teixeira RG, et al. Anorectal melanoma - histopathological and immunohistochemical features and treatment. J Coloproctol. 2014;34:95-103.
8. Park JH, Lee JR, Yoon HS, Jung TY, Lee EJ, Lim JG, et al. Primary anorectal malignant melanoma treated with endoscopic mucosal resection. Intest Res. 2015;13(2):170-4.
9. Thibault C, Sagar P, Nivatvongs S, Ilstrup DM, Wolff BG. Anorectal melanoma--an incurable disease? Dis Colon Rectum. 1997;40(6):661-8.
10. 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(11):2019-22.
11. Ascierto PA, Kirkwood JM. Adjuvant therapy of melanoma with interferon: lessons of the past decade. J Transl Med. 2008;6:62.

Cite this article as: Bhosale AM, Shrotriya S, Naik S, Kulkarni B. Anal mucosal melanoma presenting as per rectal bleed: a case report. Int J Res Med Sci 2024;12:1724-6.