

# Malignant Melanoma of the Rectum – A Rare Entity

M Desai, B Parikh, J Prajapati, P Talukdar,, R Dave

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## Abstract

Malignant Melanoma is very rare in the rectum. Long-term survival is rare, as most patients die of disseminated systemic disease regardless of treatment. A 65-year old patient presented with the history of painless bleeding per rectum since last 6 months. Recto-Sigmoidoscopy revealed a hard growth over the right lateral wall of the rectum, biopsy of which was reported to be malignant melanoma with a possibility of poorly differentiated carcinoma. Immunohistochemistry confirmed the diagnosis of malignant melanoma. There is a controversy regarding the best surgical treatment because of its poor prognosis. We report this case because of its rarity.

## INTRODUCTION

Moore was the first person to report melanoma of the anus and rectum in 1857<sup>1</sup>. Rectal malignant melanoma accounts for 0.2%-3%<sub>2</sub> or all malignant melanoma cases and 0.1%-4.6% of malignant tumors of the rectum and anus<sub>3, 4</sub>. This makes melanoma the third most common malignancy of the anorectal area<sub>5</sub>.

The treatment is not well defined since it is such a rare condition. In order to have statistically significant outcomes, the data must be collected over a long period of time<sub>6</sub>. This case is a sample of this rare entity.

## CASE REPORT

A 65 year-old male patient presented to our hospital with history of bleeding per rectum since last 2 months, difficulty in passing stool since last 3 months and difficulty in micturition since last 2 months. The patient had generalized weakness and weight loss since the last 1 month.

On general examination, the patient looked pale and emaciated. His abdominal examination was unremarkable. Inguinal region did not show any palpable lymph nodes.

Per rectal examination revealed a big exophytic growth on the right lateral side of the rectum wall with narrowing of the lumen. The upper limit of growth could not be reached. It was hard growth which bled on touch. It was palpable approximately 5 cm away from the anal verge on tip of finger. Clinical examination showed possibility of rectal malignancy.

Routine hematology investigations were unremarkable.

Chest Roentgenogram did not show evidence of pulmonary metastasis or any other finding. Patient was posted for sigmoidoscopy examination which confirmed the presence of a hard growth over the right lateral wall of rectum with stricture formation extending from approximately 5-6 cm from the anal verge. The scope could be negotiated up to 20 cm from the anal verge with difficulty. On palpation, the growth was mobile. A punch biopsy was taken from the growth.

Computed tomography of abdomen and pelvis revealed presence of a large, irregular hypodense mass with heterogeneous enhancement in the rectum. Few enlarged pararectal lymph nodes were present. Bony pelvis was normal.

The histopathology report of the biopsy suggested extensive inflammation of the rectal mucosa and a small focus of malignant cells. Few cells showed brown pigmentation. The histopathology report favored two possibilities, first, malignant melanoma and second, poorly differentiated carcinoma.

The immunohistochemistry report suggested that the CK, EMA and CEA stains were negative and Vimentin, S-100 and 11MB-45 were positive. It confirmed the diagnosis of malignant melanoma of the rectum.

**Figure 1**

Figure 1: Photograph of a specimen showing melanoma of rectum



### DISCUSSION

Studies with large series suggest a female predominance for rectal malignant melanoma<sup>2,4</sup>, however, in our case, the affected patient was male. The lesion is most often discovered in the fifth and sixth decade of life<sup>6</sup>. This is the same age group as seen in our case.

Malignant melanoma arise commonly from skin, they may rarely arise from melanocytes present at extra cutaneous sites<sup>7</sup>. It is usually diagnosed in an advanced decade of life with rectal bleeding as the main symptom<sup>8</sup>.

Patients generally present with rectal bleeding and a sensation of a mass which is usually attributed to hemorrhoids or to a polyp. It cannot be diagnosed early because of these benign symptoms so it is bulky at the time of presentation<sup>9</sup>.

The absence of early clinical manifestations and the lack of clinical suspicion due to its infrequency contribute to delayed diagnosis. Up to 60% patients have been found to have metastatic disease at the time of diagnosis<sup>10</sup>.

They have a poor prognosis<sup>11</sup>. The factors that may account for the poor prognosis include the advanced nature of the disease at the time of diagnosis, ulceration, the rich vascularity of the rectal mucosa, great risk of hematogenous metastasis and high biological aggressiveness of the tumor<sup>12</sup>. Slingluff and Cooper reported that 5 year survival rate was less than 10%<sup>10</sup>. Mayo clinic, however, reported 5 year survival as 22 % and cure in 16% in their study<sup>4</sup>.

Long term survival is rare as most patients die of

disseminated systemic disease regardless of treatment, so some authors do not consider radical surgery as choice of treatment<sup>12</sup>.

There is controversy regarding best surgical treatment because of its poor prognosis<sup>13</sup>. Survival seems to depend on staging and does not seem to be modified by surgical radicality<sup>8</sup>. Aggressive surgical management has included abdominoperineal resection (APR) or posterior pelvic exenteration<sup>14</sup>.

No difference in survival has been demonstrated after APR or local excision when patients are compared by similar stages<sup>10</sup>. Transanal local excision has less morbidity than APR and avoids the necessity of a colostomy, so most authors consider it as the first choice treatment for anorectal melanoma when it is technically feasible<sup>10</sup>.

Ideal treatment of anorectal melanoma still remains controversial, with 90% of patients dying irrespective of the surgical approach or multidisciplinary treatment<sup>7</sup>. Some like Cooper et al<sup>10</sup> advocate APR because of more effective local control and since it removes clinically undetectable lymph nodes. While others like Ward et al<sup>11</sup> suggested wide local excision (WLE) with a 2 cm margin along with therapeutic inguinal lymph nodes dissection for positive nodes, as majority of the patients have metastasis at the time of diagnosis and survival is not significantly better with radical surgery.

Yap et al reviewed 17 large case series from over the past 10 years. The survival of patients treated by either abdominoperineal resection or wide local excision was analyzed according to stage of their disease. Comparison of the survival of patients who underwent APR with those who underwent WLE showed no satisfactory advantage for either procedure in patients at all disease stages. APR should therefore only be performed when local excision is not possible or as a palliative procedure<sup>15</sup>.

Our patient had an operable lesion and an abdominoperineal resection was done.

### CONCLUSION

Rectal melanoma is a rare disorder. When a patient is presented with recurrent rectal bleeding, the diagnosis of anorectal melanoma should always be considered. Unfortunately, early diagnosis has not changed the long-term survival rate. The prognosis is poor and surgical management should be the least morbid: a wide local

excision when technically feasible, and a combined APR for large tumors. Locally advanced inoperable tumors may be given palliative chemotherapy.

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### CORRESPONDENCE TO

Dr. Bhavana C Parikh, Department of Surgical Oncology, 2, R.M.O. Quarters' Nr. M.P. Shah Cancer Hospital, Gujarat Cancer and Research Institute [G.C. & R.I], New Civil Hospital Campus, Asarwa, Ahmedabad-380016, Gujarat-INDIA. Mobile no: +91-9825750928, E-mail: bhavu309@yahoo.com Fax no: +91-79-22685490.

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**Author Information**

**Mital Desai, M.S. (Gen. Surgery), MRCSEd**

Observer in Department of Surgical Oncology, Gujarat Cancer & Research Institute

**Bhavana Parikh, MS (Gen. Surgery)**

Fellow in Department of Surgical Oncology, Gujarat Cancer & Research Institute

**Jayesh A. Prajapati, M.Ch. (Oncosurgery)**

Associate Professor in Department of Surgical Oncology, Gujarat Cancer & Research Institute

**Phulkumari Talukdar,, M.D (Radiation Oncology)**

Assistant Professor in Department of Radiation Oncology, Gujarat Cancer & Research Institute

**R. I. Dave, M.S. (General Surgery), FICS**

Deputy Director, Surgical Services, Gujarat Cancer & Research Institute