Primary Malignant Melanoma Of Anal Canal

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Citation

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Abstract

Primary melanoma of the anal canal is an unusual pathological entity that accounts for approximately one percent of all malignant invasive tumors in the region. It is usually mistaken for either hemorrhoid or anal polyp with bleeding further complicating the clinical scenario delaying exact diagnosis and management. It carries very poor prognosis. We present such an unusual case at our institute that presented in the metastatic phase requiring a disciplined multi-modality approach.

CASE HISTORY

A 70-year-old Hindu female, residing in Mumbai and hailing from the north of India, presented with bleeding per anal canal and painful defecation for 4 months.

The patient was apparently alright 4 months back when she initially presented with similar complaints at her native place. Then a local doctor subjected her to undergo surgery for hemorrhoids. After the operation she was better for some days but later presented with similar complaints for which she was referred to a higher center in the district for further management. One of her relatives working in Mumbai got her admitted at our institute.

On examination, she was averagely built and nourished. She was pale and had bilateral inguinal lymphadenopathy. Her systemic and per abdominal examination was within normal limits.

On per rectal examination, externally, there was the scar of the previous surgery. Her sphincter tone was preserved and there was no tenderness. Two centimeters from the anal verge there was a large, solitary, nodular, cauliflower-like mass arising from the posterior wall measuring 7x4x3cm. It was hard, non-mobile, non-tender and mostly intraluminal and without any active bleeding. A punch biopsy was taken along with FNAC of inguinal lymph nodes.

Her routine biochemical evaluation was done and showed an Hb of 9.4, an ESR of 120 and LFT within normal limits; HbsAg and HIV status was negative. Transrectal and abdominal ultrasonography showed pararectal lymph nodes and no adjacent or distant organ involvement. Colonoscopy was not performed due to stricture at the dentate line. CT scan was not done. FNAC report of lymph nodes showed metastasis from melanoma. Depending on the histopathology report and clinical evaluation, the patient and her relatives were counseled in detail regarding the patient status, available surgical options and need of permanent colostomy.

A decision to perform abdomino-perineal resection (APR) was carried out. There was no liver metastasis or ascites. The cut open specimen showed a dark black tumor mass at the dentate line with black pararectal lymph nodes typical of melanoma. The specimen was sent for histopathological study. The patient's postoperative condition was stable and her recovery was uneventful.

Figure 1

Photograph 1: Cut open anal malignant melanoma in the specimen of APR.

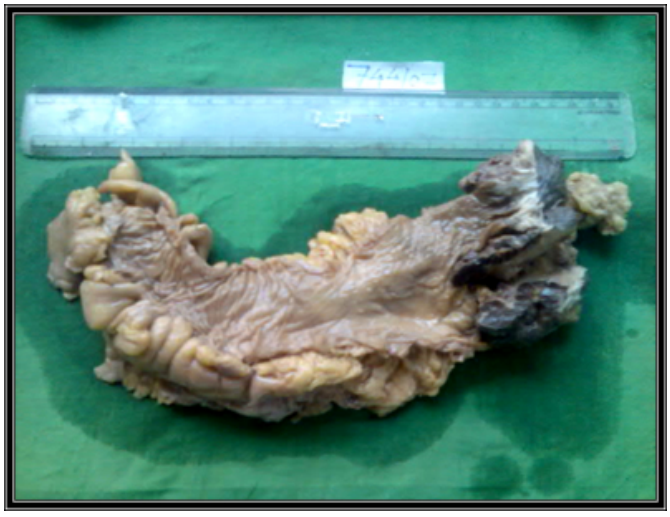
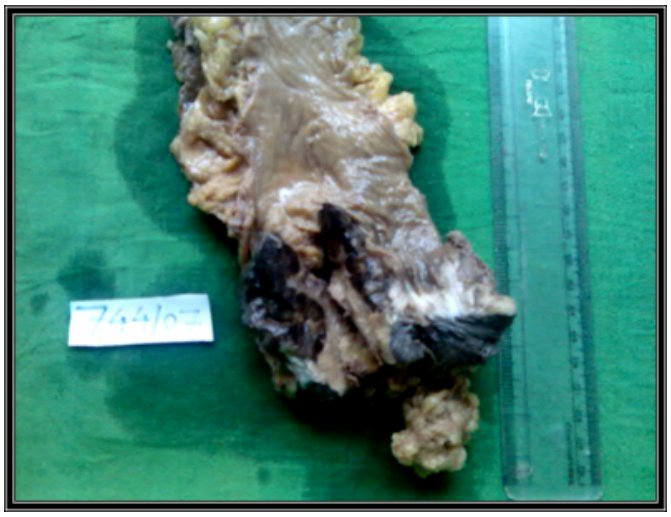


Figure 2

Photograph 2: Magnified view of cut open specimen.



Macroscopically, histopathology showed a large cauliflower-like dark black tumor with uneven surface, encircling almost the entire posterior half of the anal canal just below the dentate line with few similar dark pararectal lymph nodes. On microscopy, it showed nests of tumor cells with few epitheloid and spindle-shaped cells containing large quantities of melanin deposition in them. All margins were clear. Pararectal nodes showed metastasis.

DISCUSSION

Among all the malignancies arising from the anal canal, primary anal melanoma comprises only 0.25% to 1.25%[1]. Skin and eye are the commonest sites for melanomas in the human body followed by anal region at third place. It is regarded as the disease of the aged, commonly seen between fifth and seventh decade of life. White population is more commonly affected than black without any specific sex predilection. Recent studies show an association with HIV infected patients[2].

Macroscopically, in the majority of cases, the tumors are polypoidal and pigmented with the dentate line as commonest originating site. Sometimes they are seen as nodular prolapsed masses. At microscopy, the tumor cells are arranged in nests and individually either spindle-shaped or epitheloid. These clusters of tumor cells invade the sqamous mucosa that is overlying in a special pagetoid manner.

Surgical management in these patients imposes a dilemma, as there is no fix protocol for it. Various procedures from wide local excision to more radical one like APR have been proposed. However, ultimately patient's stage will determine which procedure is suitable for him/her.

Our patient presented with large local tumor with few palpable lymph nodes that warranted a good radical approach of APR. In view of generalized poor prognosis, groin dissection was not considered. Advanced disease with distant metastasis, visceral involvement and large primary usually needs only local segmental resection and colostomy with chemo-radiotherapy, taking into account the patient's general condition.

Statistically speaking, there has been no significant difference observed for patients who underwent APR versus those who were just treated with wide local excision. Five-year survival is 20% in spite of good surgical clearance[3]. Recent reviews indicate that sphincter-saving local excision has emerged as the treatment of choice, as patients anyway succumb to distant metastasis regardless of the type of surgery?. Abundant lymphatics in this area facilitate early as well as widespread inguinal and iliac lymph node involvement. High vascularity in the anorectal region also leads to heamatogenous spread to liver, lungs, bones, brain and other organs.

In our patient, though there was involvement of local and inguinal lymph nodes, there was no liver or other visceral metastasis or ascites. Our patient was offered chemo-radiotherapy with a 5-FU based regimen advocated by GI intergroup protocol. At 6 months follow-up, the patient was showing steady good response. These patients need meticulous follow-up.

Multimodality approaches have been suggested combining chemotherapy, radiotherapy and immunotherapy?. Usage of vaccines in melanoma patients is depending on the tumor cells' peculiar immunogenic response. Primary studies have not shown any efficacy in treating melanoma.

Our case shows a typical presentation of this rare tumor involving the anal canal with few adjacent pararectal lymph nodes and few inguinal ones without any distant liver or visceral metastasis or ascites. We would like to report such a large primary malignant melanoma without any metastases making it still a rare case.

CORRESPONDENCE

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