ORIGINAL RESEARCH PAPER

General Surgery

ANAL CANAL MELANOMA MASQUERADING AS HEMORRHOIDS

KEY WORDS: primary anal melanoma, hemorrhoids, abdominoperineal resection

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ABSTRACT

Primary malignant melanoma of anus is a rare and an aggressive neoplasm that tends to invade locally and metastasize early in the course of the disease. It is often misdiagnosed as hemorrhoids or as one of the benign anorectal disorders, due to the lack of pathognomonic symptoms. Owing to the aggressive nature and delayed diagnosis, the prognosis remains dismal, being less than 20%. Optimal treatment is still controversial with no significant survival advantage and ranges from a less morbid wide local excision to a significantly morbid Abdomino perineal resection. Chemotherapy or radiotherapy are kept in store for more advanced disease. We report a case of a 38 year old male with a mass descending per rectum, misdiagnosed as hemorrhoids and later proved to be advanced malignant melanoma of anal canal.

INTRODUCTION:

Anal canal melanoma accounts for 0.5-2% of anal malignancies and less than 2 % of all melanomas.[1] Common presentations include rectal bleeding, anorectal pain, altered bowel habits or a rectal mass[2]. Therefore, given the lack of pathognomonic clinical complaints, early diagnosis is difficult to make. The management is always a multimodality approach with surgery opted as a primary modality for those presenting early. Sphincter saving WLE or Abdomino perineal resection being the two viable options. The line of management chosen is highly dependent on various patient and tumor related factors like location and size of tumor, possibility of an R0 resection and the probability of recurrence[2]. Radiotherapy for local control and chemotherapy to treat the metastasis are also extensively available. Thus the treatment modality being individualized, from the available three options.

CASE REPORT

A 38 year old male, who came with a chief complaint of mass descending per rectum. It aggravated on straining and was relieved on lying down. He gave a complaint of straining at stools with streaks of blood observed occasionally. There was no other significant present, past or family history On examination, he was a well built and nourished man, conscious and coherent. He was notably pale.

His per abdomen examination revealed nothing significant. Digital rectal examination and proctoscopy revealed a 4x4cms bluish black friable mass at the anal verge, extending upwards, from 6'o' clock to 9'o' clock position. Margins were ill defined and upper limit could not be appreciated. The tone of the anal sphincter was normal.

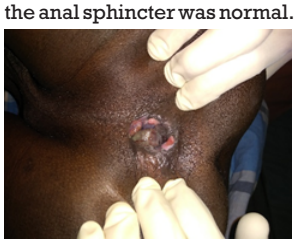

Fig 1: Inspection showing the mass

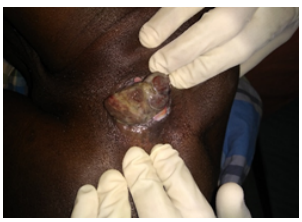

Fig 2: mass descending on straining

He has consulted various medical professionals with the same complaint, in the past 3 months, all of whom have advised him some form of conservative management, considering it to be prolapsed hemorrhoids.

His blood investigations reveled a microcytic hypochromic picture with hemoglobin of 7.8g/dl. His liver,renal function tests and coagulation profile were all within normal limits. He was further evaluated with a ultrasound of the abdomen, which was normal. Contrast enhanced Computed tomography soon followed, which revealed an irregular wall thickening noted in anal canal with thickness of 3.3 cms, extending upto distal rectum with **peritoneal deposits noted along right paracolic gutter.**

Colonoscopy revealed a growth starting immediately at the anal verge, extending upto 10 cms above, scope was passed beyond with difficulty, rest of the bowel was normal. The biopsy taken following the procedure gave an impression of a malignant melanoma. It stained positive on HMB 45 and S100 stains.

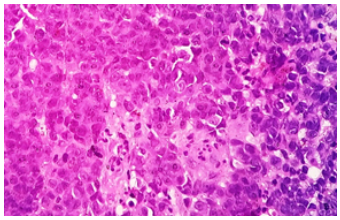

Fig 3: HPE of the mass with eosin and heamatoxylin stain

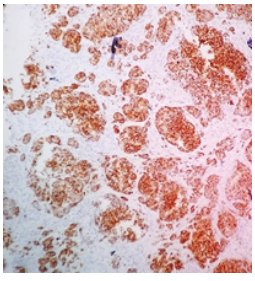

Fig 4: Slide with HMB 45 stain

Considering the presence of peritoneal deposits, a primary diagnosis of advanced melanoma of anal canal, he was subjected to palliative chemotherapy (cisplatin and dacarbazine) with the consensus of the tumor board.

DISCUSSION:

Anal canal melanoma accounts for 0.5-2% of all anal malignancies and less than 2% of all melanomas[1]. They are the third most common variety following skin and ocular variety[1]. It was first discovered by Moore in 1857, since then there are less than 500 reported cases of anal canal melanoma[3].

Skin or mucosal melanoma are derived from melanocytes, which are of neural crest origin. They migrate during fetal development and reside in skin (primarily) and the uveal tract and retina in the eye. They also colonize in the mucosal surfaces of the head and neck, anal canal and female genetalia[4].

Chronic irritation is hypothesized as the cause of the malignant transformation. Owing to the rarity of the case, a list of risk factors and etiology cannot be drawn[5].

There is a significant delay noted in diagnosing this condition owing to the presence of non specific symptoms like bleeding or mass descending per rectum, tenusmus. They are often diagnosed as benign and treated accordingly[6]. Due to the delay at diagnosis and the aggressive nature of the tumour, majority of the patients present in an advanced state. Most common sites of metastasis noted to **inguinal lymph nodes, mesenteric lymph nodes, hypogastric lymph nodes, para-aortic lymph nodes, liver, lung, skin and brain[7].**

The conventional staging is not followed for this condition. They are staged as follows:[8]

Stage I- local disease only
Stage II- local disease with regional spread
Stage III- Distant metastasis

Following the diagnosis and adequate staging, we plan to device a treatment strategy for the patient. If the patient were to present any earlier, with only local disease, surgery will the primary modality of management[8]. There is an ever existing controversy on which procedure would deem for the patient. On one hand, wide local excision is less morbid, but has a higher chance of R1 resection and recurrence. Hence, chosen for local lesions, in a setup with frozen section facilities[8].

On the other hand, abdomino perineal resection, is a highly morbid procedure where patients end up with a permanent colostomy. This has a documented lesser chance of recurrence and a better promise at achieving R0 resection. Preferred for sphincter involving lesions and circumferential lesions[8].

The highlighting feature being both the modalities do not offer any survival advantage to the patient.

Lymph node dissection, with a formal inguinal block dissection is done in the presence of clinically apparent nodes, or those diagnosed on imaging. Sentinal lymph node detecting techniques are gaining popularity in cutaneous melanoma but its role in anal canal melanoma is yet to be proven[9].

The tumor shows 20% response to dacarbazine. The Dartmouth regimen, consisting of dacarbazine(220 mg/m2), carmustine (150 mg/m2), cisplatin(25 mg/m2) and tamoxifen (20mg), a 42 day cycle is slowly loosing its consensus owing to the added side effects and no documented synergistic effect[9]. Radiotherapy may also be administered in a dosage of 30Gy over 2 weeks, divided as 5 fractions, predominantly for local control. There is no universal consensus on the protocol that needs to be followed owing to the rarity of the condition and delayed presentation[10].

There are a wide variety of new modalities of management coming up. Biochemotherapy is one such, where a chemotherapeutic agent is combined with IL-2 or interferon 2 alpha and administered intravenously. The same combination of interferon 2- alpha or interferon beta combined with a chemotherapeutic drug can be administered as an intratumoral injection. A method gaining popularity and deserves mention is electrochemotherapy where the chemotherapeutic drug is administered following electrical stimulation of the tumor bearing area. This enhances permeation and better uptake of the drug.[5]

All the modalities thus mentioned are at its infancy and not standardized.

CONCLUSION:

Anal canal melanoma is by itself a very rare and an aggressive tumor. Delayed presentation adds fuel to the fire, thus making it a diagnostic and a therapeutic challenge. High index of suspicion especially, when symptoms are incongruent with the clinical findings and with a positive family history of ano rectal malignancies, demands further evaluation before considering it as benign and planning for surgery.

REFERENCES:

1. Singer M, Mutch M G: Anal melanoma. Clin Colon Rectal Surg 2006;19:78-87
2. Chute DJ, Cousar JB, Millis SE: Anorectal malignant melanoma: morphological and immunohistochemical features. Am J Clin Pathol 2006 ;126:93-100
3. Moore R: Recurrent melanosis of the Rectum, after previous removal the verge of anus, in a man aged sixty-five. Lancet 1857;1:290
4. Kelly P, Zagers GK, Cormier JN, Ross MI: Sphicter sparing local excision and hypofractionated radiation therapy for anorectal melanoma: a 20 year experience . Cancer 2011;117:4747-4755
5. Kim KB, Sanguino AM , Hodges G et all, : Biochemotherapy in patients with metastatic anorectal mucosal melanoma . Cancer 2004;100:1478-1483
6. Chang AE, Karnell LH, Meneck HR: the cancer datebase report on cutaneous and non-cutaneous melanoma : a summary of 84, 836 cases from the past decade . The Americans College of Surgeons Commision on Cancer and American Cancer Society. Cancer 1998;83:1664-1678
7. Zhang S, Gao F, Wan D: Effect of misdiagnosis on the prognosis of anorectal malignant melanoma. J Cancer Res Clin Oncol 2010;136:1401-1405
8. Morson BC, Volkstadt H: Malignant melanoma of the anal canal .J Clin Pathol 1963;16:126-132
9. Slinglugg CL Jr, Seigler HF: Anorectal Melanoma : clinical characteristics and the role of abdominoperineal resection. Ann plast Surg 1992;28:85-88
10. DeMatos P, Tyler DS, Seigler HF: Malignant melanoma of the mucous membranes : a review of 119 cases. Ann Surg Oncol 1998;5:733-742