

# HAEMORRHOIDS OR ANAL MELANOMA, IMPORTANCE OF PREOPERATIVE HISTOPATHOLOGICAL EXAMINATION: A CASE REPORT

RANA K. SHERWANI, AMIT KUMAR, MOHAMMAD H. RAZA

Departments of Pathology and General Surgery, JN Medical College, Aligarh Muslim University, India

Haemorrhoids are the most common lesion affecting the anorectal region, whereas anal melanoma constitutes only 1% to 3% of all malignant tumours of anal canal. The clinical presentations of bleeding per rectum, altered bowel habits and a protruding mass are common to both.

We report a case of a female with classical clinical presentation of prolapsed haemorrhoids which on histopathological evaluation was found to be malignant melanoma. The case highlights the significance of exact diagnosis prior to any surgical intervention.

**Key words:** haemorrhoids, melanoma, rectal mass, differential diagnosis.

## Introduction

Haemorrhoids are the most common pathology of the anorectal region, affecting up to 50% of the population, and also the most common cause of anorectal bleeding [1], whereas primary anal melanoma constitutes only 1% to 3% of all the malignancies arising from the anal canal [2]. Though these tumours are rare, the clinical symptoms such as rectal bleeding, altered bowel habits and a protruding mass are non-specific, often leading to a misdiagnosis of thrombosed haemorrhoids [3].

The treatment protocol for an aggressive anal melanoma is drastically different from the therapeutic interventions in case of benign haemorrhoids, and hence an exact and early diagnosis is essential before any surgical procedure in such cases.

## Material and methods

A 42-year-old female patient presented with a mass coming out of the anus for 2 days. Clinical history revealed that she had been rectal bleeding off and on for 3 months and a painful mass protruding out of the anus during strenuous work and defecation for 1 month. Initially this mass receded by itself but for the last two weeks the patient had to manipulate

it to reposition it. This manipulation by the patient had failed for the last two days and the patient reported herself to the hospital.

Lab investigations revealed that the patient was anaemic with a haemoglobin level of 7.0 gm/dl.

On initial per rectal examination, the patient was provisionally diagnosed as a case of prolapsed haemorrhoids and palliative repositioning was done under local anaesthesia. However, digital and proctoscopic rectal examination, under general anaesthesia, revealed a firm blackish spherical mass measuring 6 × 5 × 4 cm with no bleeding, non-pedunculated, not freely movable and arising from the anterior upper part of the anal canal (Fig. 1). This aroused the clinical suspicion of a malignant tumour with melanoma as a differential diagnosis, and biopsies were taken.

Histopathological evaluation revealed a tumour mass composed of spindle cells, focally containing abundant melanin pigment (Fig. 2, 3). The overlying mucosa was ulcerated. No epithelium was identified and hence comment on junctional activity was not possible. A diagnosis of malignant melanoma was made and confirmed by positive immunohistochemical staining for HMB45.

The prognosis was explained to the patient, who took leave against medical advice and was subsequently lost to follow-up.

## Discussion

Primary anal melanoma constitutes only 1% to 3% of all malignancies arising from the anal canal, with female predilection and presenting in the fifth to sixth decade [2]. The clinical features associated with anorectal melanomas, i.e. rectal bleeding, mass and pain, are non-specific for various benign and malignant lesions of the anal canal, haemorrhoids being one of the most common misdiagnoses as they are the most common anorectal lesion and the most common cause of rectal bleeding [1, 3-5].

Clinically perceptible pigmentation is a cardinal feature of melanoma and melanotic pigment within the tumour can be perceived as black, brown, tan pink or white [6]. Prolapsed, necrosed or thrombosed haemorrhoids may also show similar colour changes, however. The clinical suspicion of malignancy in our case was due to the findings of per rectum examination: specifically, firm, blackish spherical mass, non-pedunculated and fixed with origin from the anterior anorectal wall. Several biopsies were taken before any definitive surgical procedure.

The clinical features are only suggestive when the lesions appear pigmented macroscopically. The histological certainty for diagnosis of melanoma depends on the demonstration of melanin pigment and is simple when the tumour is pigmented (75% of cases) [7]. In our case the tumour mass was composed of spindle cells, focally containing abundant melanin-like pigment. However, for confirmatory typing as spindle cell melanoma, the immunohistochemistry panel must include S-100, vimentin and melanoma-specific antibodies HMB-45 and Mart-1 [7, 8]. The presence of junctional activity favours a primary malignant melanoma, although it may be obscured by ulceration [8]. The overlying mucosa was ulcerated, no epithelium was identified and hence comment on junctional activity was not possible in our case. The absence of any relevant history and clinical finding regarding melanoma elsewhere helped us to diagnose it as primary anorectal melanoma.

The diagnosis of melanoma is generally made after routine surgical treatment of haemorrhoids. This sequence routinely results in the specimen not being processed properly and adds to difficulty in diagnosis [9]. The diagnosis is rendered after a supposedly therapeutic procedure which may be only haemorrhoidectomy, polypectomy or conservative management; whereas treatment options for melanoma are wide local excision and abdominoperineal resection, depending on the stage of the disease, which includes depth of invasion, local involvement and metastasis. However, no significant difference in survival in patients treated by wide local excision or abdominoperineal resection has been

observed, although the latter has proved more effective to control the local disease but without clear improvement in survival [10, 11].

The five-year survival rates for anorectal melanoma have been less than 20% in all previous



Fig. 1. Blackish growth originating from anterior rectal wall

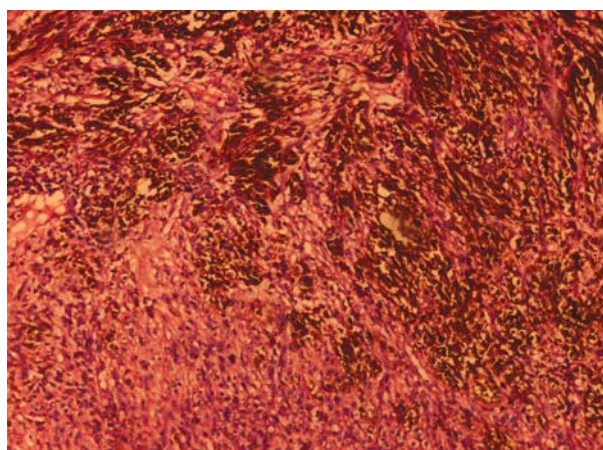


Fig. 2. Tumour mass showing spindle cells and focal pigment deposition (H&E, magnification 200 $\times$ )

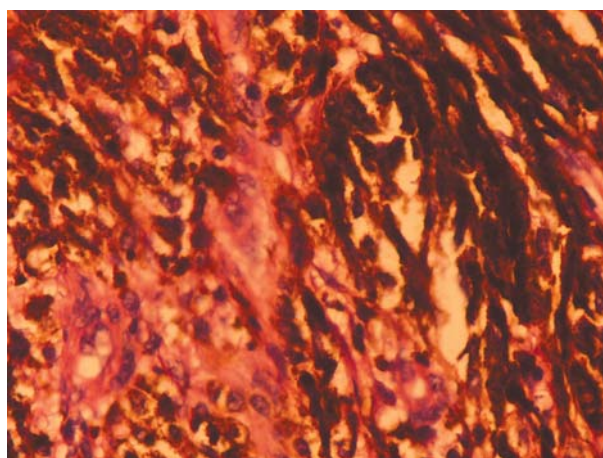


Fig. 3. Tumour mass with abundant brownish black pigment and spindle cells (H&E, magnification 400 $\times$ )

studies [12]. Hence, considering the aggressive nature of these neoplasms the prognosis should be explained, treatment protocols should be customised as per the stage of the disease and condition of the patient, and above all focus and emphasis must be placed on improving the quality of life for the patient.

After explaining the prognosis and treatment options, the patient in our case took leave against medical advice and was subsequently lost to follow-up.

## Results

We conclude that a detailed per rectal examination is the key to diagnosis of anorectal melanomas masquerading as benign haemorrhoids.

Even a mild clinical suspicion should be first confirmed or negated, for which meticulous histopathological examination of biopsies taken from the lesion is absolutely necessary.

Any surgical intervention in such cases should take place only after aggressive anorectal melanoma has been excluded or confirmed.

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## Address for correspondence

Dr. Amit Kumar  
 Department of Pathology,  
 JN Medical College, Aligarh Muslim University,  
 Uttar Pradesh, India 202002  
 phone: +919319890315  
 e-mail: gsamitvm77@gmail.com