

Malignant rectal melanoma: uncommon and aggressiveMazaher Ramezani¹, Atena Azami¹, Elham Abdali¹, Masoud Sadeghi^{2*}¹Department of Pathology, School of Medicine, Kermanshah University of Medical sciences, Kermanshah, Iran²Medical Biology Research Center, Kermanshah University of Medical sciences, Kermanshah, Iran***Corresponding author**

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Abstract: Anorectal melanoma is an uncommon and aggressive disease. We present one case of rectal malignant melanoma with history of chronic constipation in one Iranian man. In April 2015, a 73-year-old farmer man referred to Clinic of Surgery with complaints of abdominal pain and bloody stool since two months ago with history of chronic constipation. He did transanal rectal mass resection. The IHC report in May 2015, showed that Melan-A and HMB-45 were positive and synaptophysin and LCA were negative. Eight days later, he did abdomino perineal resection with pelvic lymph node dissection. A rectosigmoid sample with dimension 22.5*3.5 cm and thickness of 2cm with distance of 1.5cm from rectum's margin was sent to pathobiology laboratory. Five days after surgery, the patient was ill with abdominal pain, tachypnea, respiratory distress and black necrotic malodorous site of colostomy. He died in June 2015 (five days after second surgery) due to cardiopulmonary arrest unresponsive to cardiopulmonary resuscitation. In conclusion, malignant rectal melanoma is aggressive malignancy and therefore, immediate and precise diagnosis is necessary. Also, due to rarity and misdiagnosis, physicians should be much more familiar with malignant melanoma and its clinical awareness.**Keywords:** Malignant rectal melanoma, Abdomino perineal resection, Case report.

INTRODUCTION

Anal melanoma is the third most common melanoma after the cutaneous and ocular varieties. It is the most common site for primary gastrointestinal melanoma [1]. Anorectal melanoma is an uncommon and aggressive disease. The anorectum is the third most common location of malignant melanoma after skin and retina [2]. Therefore, due to the aggressive nature of this disease, an early diagnosis and prompt treatment are essential [3]. Anorectal malignancies are commonly adenocarcinoma or squamous cell carcinoma [4]. Lesions are difficult to diagnose because many are amelanotic and patients present with nonspecific complaints such as anal discomfort or rectal bleeding. After diagnosis, the main treatment available is surgical resection. Sentinel lymph node mapping has an unclear role in its management. Adjuvant therapy has long been recommended; however, there are no strong data to support its use [2]. The reported incidence of anal melanoma is 0.04% in Australia, 0.5% in New York City, 1% in Milan, and 1.19% in China [5].

We present one case of rectal malignant melanoma with history of chronic constipation in one Iranian man.

CASE REPORT

In April 2015, a 73-year-old farmer man referred to Clinic of Surgery with complaints of abdominal pain and bloody stool since two months ago with history of chronic constipation. In his CT scan, increasing of wall thickness in the rectum

asymmetrically had been shown. The surgeon diagnosed preoperatively rectal cancer. He did transanal rectal mass resection. The pathology specimen was a portion of rectum measuring 5.5*5.5*3 cm with circumferential firm mass (5.5cm) obstructing the lumen. The pathology report showed malignant melanoma underline mucosal surface extending to muscularis propria and both margins were involved by tumoral cells (Figure 1). In clinical report, the patient had no history of skin diseases. The patient had drug history of methoral and ASA with history of ischemic heart disease but no significant changes in angiography. He was not cigarette smoker but was opium addict (one gram per day). The IHC report in May 2015, showed that Melan-A and HMB-45 were positive and synaptophysin and LCA were negative (Figure 2 and Figure 3). Eight days later, he did abdomino perineal resection with pelvic lymph node dissection. A rectosigmoid sample with dimension 22.5*3.5 cm and thickness of 2cm with distance of 1.5cm from rectum's margin was sent to pathobiology laboratory. In pathology report, there was a solid tumor with diameter of 3 cm and cross-brown that showed metastatic malignant melanoma involving peribowel fat and 5/6 metastatic lymph nodes (margin was free of tumoral cells and intestinal mucosa had ulceration). After second surgery, the patient was transmitted to ICU with intravenous antibiotic therapy (Cefazolin and metronidazole). He received methadone for sedation. Due to metabolic acidosis he received bicarbonate. Five

days after surgery, the patient was ill with abdominal pain, tachypnea, respiratory distress and black necrotic malodorous site of colostomy. He died in June 2015 (five days after second surgery) due to cardiopulmonary arrest unresponsive to cardiopulmonary resuscitation.

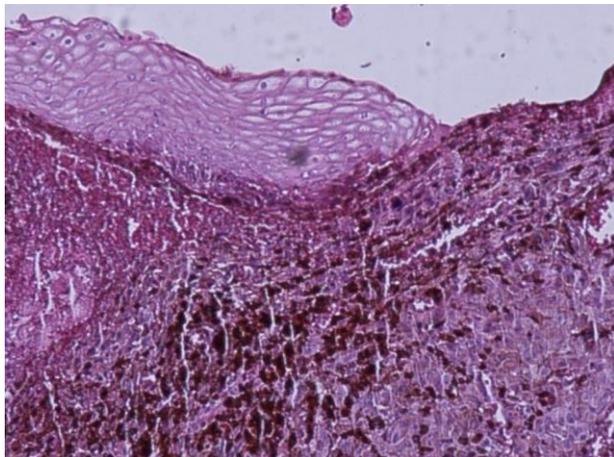


Fig 1: Malignant melanoma underlines anorectal mucosa (hematoxylin and eosin (H &E), ×100)

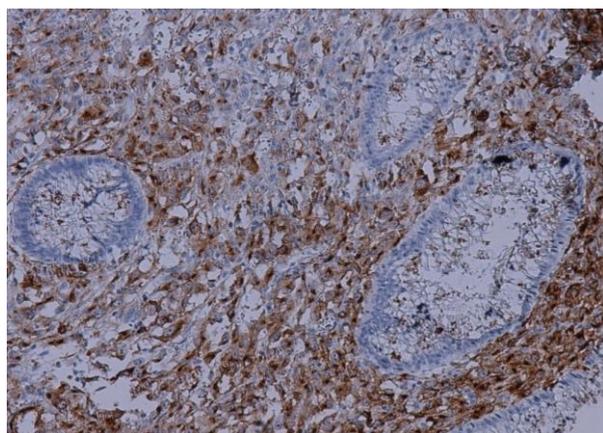


Fig 2: Immunohistochemistry of HMB45-positive, ×100

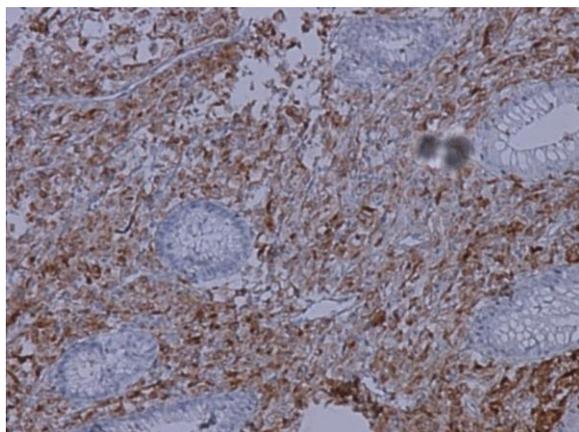


Fig 3: Immunohistochemistry of Melan A-positive, ×100

DISCUSSION

The incidence rate of anorectal melanoma has been reported to be 0.1%-4.6% of all anorectal malignant neoplasias and 0.4%-3% of all melanomas [6]. It usually appears in elder patients with clear female predominance [7,8], varying from 54%-76%. Due to its relative rarity, the treatment of anorectal melanoma is controversial; while it is clear that surgical resection is favored the extent of surgery has been called into question [9]. Anorectal melanoma has a poor prognosis with early dissemination despite aggressive surgical and adjuvant treatment [10]. The most common symptom is rectal bleeding [8], which is often mistaken for bleeding associated with hemorrhoids [3, 8, 11]. Diagnosis is very difficult, and initial diagnosis may be incorrect in 80% of all cases [11]. Macroscopically, the malignant melanomas are polypoidal and pigmented while microscopically, the cells are arranged in nests with characteristic immuno staining specific for melanosome protein [12]. The histopathological findings are similar to those of melanomas of other origins that is the identification of melanin and immunohistochemical staining for S100, HMB-45, and/or Melan A [13].

There are some reports that these surgical therapies have minimal impact on prognosis, but they can have some effect in controlling symptoms or improving the patient's quality of life [14]. Abdomino perineal resection (APR) is the mainstay of treatment. APR is thought to reduce the probability of recurrence by controlling the spread to mesenteric lymph nodes and creating a larger negative resection margin [15]. The median survival in most patients ranges from 12 to 24 months, and five-year survival is between 10-22% [4, 16]. In this study, the patient was male and had very short survival (around 2 months).

CONCLUSIONS

Malignant rectal melanoma is aggressive malignancy and therefore, immediate and precise diagnosis is necessary. Also, due to rarity and misdiagnosis, physicians should be much more familiar with malignant melanoma and its clinical awareness.

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