



ABDOMINAL MALIGNANT MELANOMA: RARE CASE REPORT

General Surgery

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ABSTRACT

Abdominal malignant melanoma is a rare malignancy with the tendency to metastasize and locally invade tissues more readily than other malignant tumor of the abdomen. The chameleonic presentation of malignant melanoma, its asymptomatic condition, rarity of the lesion, poor prognosis and the necessity of a highly specialized treatment are factors that should be seriously considered by the involved health care provider. Herein we report a rare and interesting case of abdominal malignant melanoma which was clinically and histopathologically diagnosed with a brief review of literature, has been discussed.

KEYWORDS

Supraclavicular Lymph Node , FNAC, Diagnostic Laproscopic, CECT Abdomen, Abdominal Malignant Melanoma

INTRODUCTION

The French physician René Laennec was the first to describe melanoma as a disease entity. Malignant melanoma of the abdomen is an extremely rare tumor arising from the uncontrolled growth of melanocytes found in the basal layer of the mucous membranes of skin which migrate to peritoneum and bowel.[1,2] Melanocytes are neural crest-derived cells that migrate to the skin, mucous membranes and several other sites. Globally, in 2012, melanoma occurred in 232,000 people and resulted in 55,000 deaths.[3] Australia and New Zealand have the highest rates of melanoma in the world.[3] It has become more common in the last 20 years in areas that are mostly Caucasian.[3]

The rate of melanoma has increased in the recent years, but it is not clear to what extent changes in behavior, in the environment, or in early detection are involved.(4)

Malignant melanoma is reported to metastasize to all organs of the human body [5-8]. Although it is common for it to metastasize to the gastrointestinal tract (GIT), a melanoma located primarily in the gastric mucosa is an uncommon tumor [9,10]. The median survival time for melanoma patients presenting with gastrointestinal invasion is less than one year [6]. The prolonged survival time reported in a few patients with gastrointestinal metastases is associated with aggressive surgical treatment, adjuvant chemotherapy and immunotherapy. The high mortality rate observed in these patients is associated with multiple metastases to other organs, such as lungs, liver, pancreas, spleen, endocrine glands, and brain [10].

This manuscript reports a case of abdominal metastatic melanoma with supraclavicular lymph node metastasis, which has been discussed with detailed investigations such as biochemical, histopathology, ultrasound and contrast enhanced computed tomography (CECT) to emphasize the necessity for early diagnosis and treatment of this deadly condition.

Case Report

In this case report the clinical course and treatment of a man with melanoma of the stomach, without any other detectable primary lesion, is presented and discussed.

A 65-year-old male patient from Giridih, Jharkhand [Figure 1] reported with the chief complaint of a pain in right upper abdomen since 1 month, which progressed gradually radiating to whole abdomen and got relieved on taking analgesics. He gave no history of any systemic illness or trauma to the abdomen. General physical examination was insignificant and her vital signs were under normal limits.

Per abdomen-soft, bowel sound & hepatomegaly present.

A single Lt supraclavicular L.N of size 2*2 cm non tender, hard in consistency, discrete and mobile present.

There is no history of any recent medications

A complete blood cell count, and urine analysis, renal function test, blood glucose, serum electrolytes, serology were within normal limits(wnl)

GGT-434 U/L, AFP-4.99 ng/ml(normal) ,Alk phosphatase-611 U/l, Sr. bilirubin-wnl, total protein-wnl, S.G.P.T & S.G.O.T- wnl.

CECT whole abdomen and pelvis shows –Multiple lobulated and Heterogeneously enhancing lesion are seen in peritoneal , retroperitoneal, pelvic and subcutaneous nodal mass lesions(Largest 7.5 cm * 5.6 cm) with metastatic lesion in liver(multiple rounded lesion of varying sizes with irregular margins and central hypodense non enhancing areas noted throughout parenchyma).

On FNAC of Lt supraclavicular lymph node it shows metastatic malignant melanoma.

On diagnostic laproscopy:- Intra op finding- Melanomatic bowel with carcinomatosis of peritonii with liver metastasis. Multiple blackish mass seen maximum of size 5*5cm arising from bowel.

On cytology of peritoneal fluid(30 ml approx.)- The cellular smears shows abundance of bacilli with greenish black pigment. There is no evidence of epithelial cells or malignant cells.

Based on the clinical examination, radiologic and histopathologic features a final diagnosis of malignant melanoma was arrived. Medical information was provided to the patient and his family regarding the diagnosis, staging, therapeutic options and prognosis. The patient was referred to a cancer institute for further management where he underwent 2 cycles of chemotherapy for which he failed to respond and eventually passed away.

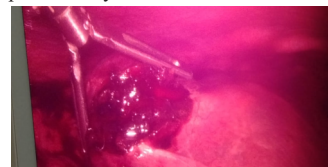


Figure 1 showing extracting melanotic growth by forceps for tissue diagnosis.



Figure 2 showing blackish material of malenoma coming while doing diagnostic laproscopy.

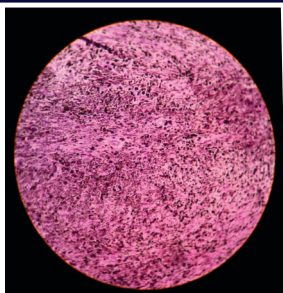


Figure 3 Findings of immunohistochemical staining: Melanocytic tumor heavily masked with abundant melanin pigment and shows focal areas of necrosis. The

DISCUSSION

Malignant melanoma is known to metastasize to different organs of the human body with an unusual predilection for the gastrointestinal tract. Gastrointestinal invasion is a rare condition and is often associated with the invasion of other visceral organs [10]. Malignant melanoma of the GIT is a rare entity among intestinal neoplasms. Primary intestinal melanoma is difficult to differentiate from metastatic melanoma, especially given that the primary cutaneous lesion has the potential to regress and disappear. In addition, melanoma by itself is a great mimicker of other neoplastic conditions and may create a major diagnostic challenge when presenting at an intra abdominal location. The mean survival time of these patients is consistently less than one year. The exact clinical incidence of gastrointestinal melanoma cannot be determined from any large series, but the stomach, after the small bowel, is the second most common site involved [10]. Symptoms include mainly gastrointestinal bleeding, abdominal pain, anorexia, nausea and vomiting, weight loss, progressive dysplasia, obstruction, and occasionally acute perforation. In our case our patient never experienced melena, GI bleeding, obstruction. It has been reported that almost all the areas of the human body can be affected by melanoma metastases.

Diagnostic laparoscopy and endoscopy permits exact morphological evaluation and direct biopsy for pathological diagnosis.

The endoscopic classification of the gastric metastases comprises three main morphological types. Firstly there are melanotic nodules, often ulcerated at the tip, which are the most frequently observed endoscopic feature. Secondly are submucosal tumor masses, melanotic or not, which are elevated and ulcerated at the apex. This is the typical aspect of "bull's eye" lesions. The third morphological type is mass lesions, with varying incidence of necrosis and melanosis. Additionally, gastric metastases may appear even as a simple ulcer [10].

The pathological evaluation could confirm the metastatic nature of the melanoma lesion. GIT metastases can appear in various morphological forms, and therefore immunohistochemistry is often useful in distinguishing between a malignant melanoma and other malignancies [11,12].

Although surgical treatment has been attempted in some melanoma patients with gastrointestinal metastases, surgery seems to be of limited practical value and should be performed only in carefully selected patients and in patients with complications. The poor general condition of the patient by the time of the diagnosis, complicated with other organ (liver, bone and lungs) metastases, did not allow any surgical treatment.

CONCLUSION

Abdominal malignant melanoma are very rare, but aggressive tumors with very low survival rates which can metastasize rapidly. Towing to its rarity, all pain abdomen should be examined with suspicion. The treatment of choice for abdominal malignant melanomas is wide surgical resection depending upon chemotherapy as an adjuvant or palliative therapy. However, close patient monitoring is imperative to check for recurrence. Therefore, every metastatic malignant melanoma case should undergo endoscopic and diagnostic laproscopic examination, usg whole abdomen for gastrointestinal metastases. Hence, the purpose of this manuscript is to emphasize on early diagnosis and to maintain high index of suspicion for those pain abdomen.

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