

Gastric and Umbilical Metastasis of Cutaneous Malignant Melanoma

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Abstract:- Gastric metastasis of primary cutaneous malignant melanoma is a rare phenomenon. Umbilical metastasis of it is even rarer. A 25 year young male patient who ignored a small atypical black skin lesion of right hand for 2 years, presented with history of fatigue, decreased appetite and heartburn. The young anaemic patient was found to have metastatic melanoma of stomach and umbilicus. The patient ignored the small, painless malignant melanoma of hand for 2 years and non-specific symptoms brought him for a medical consultation and lead to a delayed diagnosis.

Keywords:- Malignant Melanoma, Gastric Metastasis, Umbilical Metastasis.

I. INTRODUCTION

Malignant melanoma is a highly malignant tumor of melanocytes, derived from neural crest cells and accounts for 1-3% of all the malignant tumors [1]. Malignant melanoma has the lowest incidence of all the skin cancers but causes the majority of all skin cancer-related deaths [2]. It is associated with a rapid systemic dissemination with a 5-year survival rate of <15%. Majority of the patients with malignant melanoma develop metastatic disease eventually as a natural course of disease progression, even if they present with early stage [3].

Any organ of the body can be involved in metastasis, but the most Common ones are lungs, liver, bone, brain, skin and gastro-intestinal track. Overall, 58% of cases with gastro-intestinal metastasis from melanoma present as small intestinal metastasis, 22% as colo-rectal metastasis and only 20% as gastric metastasis [4]. Since majority of the patients with gastro-intestinal metastasis present multiple metastases localized to the small intestine, symptoms are often modest and non-specific. It is reasonable to include endoscopy in the thorough investigation and in follow-up examination of selected patients with non-specific gastro-intestinal symptoms; like dyspepsia, occult bleeding, decreased appetite, weight loss and anaemia; to diagnose this clinically silent and rare gastro-intestinal metastasis.

Malignant nodules localized to the umbilicus are relatively uncommon. 43% of umbilical tumors are malignant and may be primary or metastatic [5]. Primary malignant umbilical tumors are extremely rare. Malignant metastatic deposits of malignant melanoma to umbilicus are even rarer. A case of an unusual clinical presentation of

malignant melanoma of right hand with metastasis to stomach and umbilicus with anemia is presented.

II. CASE REPORT

A 25 year young male patient, mute and deaf by birth, reported to the surgical outpatient department with chief complaints of fatigue, decreased appetite, heartburn, abdominal fullness and a swelling umbilical region for the last 2 months. He had an atypical hyperpigmented, bluish-black skin lesion on the dorsum of right hand, near the base of right middle finger (metacarpo-phalangeal joint), for the last 2 years. The atypical mole was painless, but itchy, slowly increasing in size, to attain the present size of 2.0x2.0cm [Figure1]. The patient ignored this atypical and painless skin lesion of the hand for 2 years. There was no history of malena.



Fig 1:- Showing Malignant Melanoma of Right Hand.

Initial laboratory work-up revealed anemia, with hemoglobin of 7.4gm/dl, hematocrit of 24%. His liver function tests, renal function tests, coagulation profile, basic metabolic panel and x-ray chest were unremarkable. Abdominal examination revealed a 2.0x2.5cm granulating, hyperpigmented, reddish black lesion of umbilicus, partially ulcerated with sero-sanguineous discharge [Figure2]. No axillary or inguinal lymphadenopathy was noted. Rectal examination was unremarkable. Ultrasonography of abdomen was unremarkable. Given his history of anemia and dyspeptic symptoms, he was advised

upper G.I. endoscopy which showed multiple sessile polyps of varying size, with hyper-pigmented ulcerated tips, in the Cardia and body of stomach. Antrum and pylorus were normal. In the duodenum, a solitary sessile polyp with hyper-pigmented, ulcerated tip was noticed in the bulb. Biopsy from the stomach lesion showed irregular sized, pigmented, atypical cells infiltrating lamina propria, having extensive intra-cytoplasmic pigments with prominent nucleoli [figure 3]. The pigmented atypical cells were positive for immunohistochemical stains S-100 proteins and HMB-45 marker. He was diagnosed as a case of malignant melanoma of hand with metastatic melanoma of stomach, duodenal bulb and umbilical region. His sigmoidoscopy was unremarkable. C.T scan of abdomen revealed mildly dilated main pancreatic duct with multiple small nodular lesions in both adrenal glands? Metastatic deposits. He was referred to department of oncology where option of immunotherapy, palliative intent of treatment, cost involved, prognosis and over-all outcome were discussed with patient's attendants in detail. He was put on Cyclophosphamide and Tamoxifine for metastatic melanoma. Finally, the patient expired after 3 months of initiating his palliative chemotherapy.



Fig 2:- Showing Metastatic Umbilical Malignant Melanoma.

III. DISCUSSION

Malignant melanoma metastasizes to all the organs of the body with an unusual predilection for the gastro-intestinal tract. Gastro-intestinal invasion is rare and is often associated with the invasion of other visceral organs [6]. Primary gastro-intestinal melanoma is difficult to differentiate from metastatic melanoma and may create a major diagnostic challenge when presenting at an intra-abdominal location. Autopsy frequently reveals gastro-intestinal involvement in patients who have died from malignant melanoma as asymptomatic nature or non-specific symptoms of gastro-intestinal melanoma largely elude its detection. Very little evidence emerges in ante-

mortem diagnosis and that too, only in association with acute conditions such as gut obstruction, bleeding or perforation peritonitis.

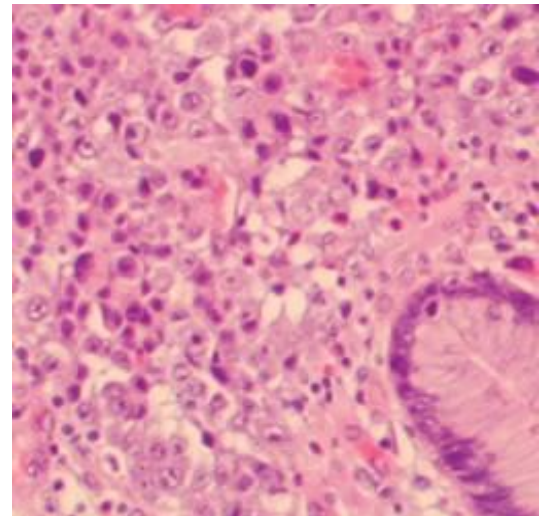


Fig 3:- Showing Histopathological View of the Gastric Metastatic Neoplastic Lesion (H&E).

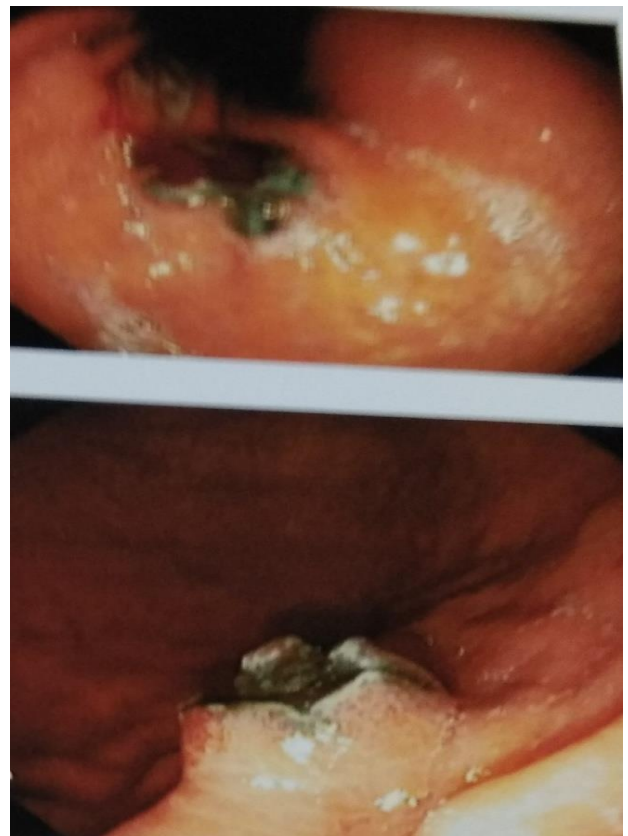


Fig 4:- Showing Endoscopic View of Metastatic Malignant Melanoma of Stomach.

The criteria for distinguishing between a primary gastro-intestinal melanoma and metastatic melanoma include 1) no evidence of concurrent melanoma or atypical melanocytic lesion of the skin, 2) absence of extra intestinal metastatic spread of melanoma, and 3) presence of intramucosal lesions in the overlying or adjacent intestinal epithelium [7].

The classical appearance of gastrointestinal melanoma endoscopically presents as multiple, small nodules that may be pigmented and ulcerated to produce a Bull's-eye or 'Target-like' appearance (Figure 4). Majority of gastric metastasis occur in the body and fundus and its appearance is classified into three types: ulcerated melanotic nodule, submucosal masses with ulcerations, and mass lesions with necrosis and melanosis [8].

It is also important to distinguish between primary and metastatic melanoma of the umbilicus. Primary malignant tumors on the umbilicus are much less common (20%). Masuki et al. found only 12 cases of primary umbilical malignant melanoma reported in the literature [5]. Although metastatic tumors account for 80% of malignancies occurring in or on the umbilicus, malignant melanoma rarely metastasizes to umbilicus. Vestigial remnants of several embryonic structures, including the urachus, vitelline artery, vitello-intestinal duct, and round ligament of the liver, pass to the umbilicus and these fibrous remnants act as a possible risk of incomplete excision and recurrence or metastatic spread [9].

Treatment of metastatic melanoma includes palliative surgical resection, chemotherapy, immunotherapy, targeted therapy and possibly radiation therapy to symptomatic sites [10]. Unfortunately, our patient had ignored the primary melanotic skin lesion of the hand for two years and he had extensive metastasis on presentation and hence he was put on palliative chemotherapy (Cyclophosphamide and Tamoxifine) after thorough discussion on all the treatment options available.

IV. CONCLUSION

In a patient with malignant melanoma, with presence of gastrointestinal symptoms or anemia should undergo endoscopy and other investigations to exclude metastatic tumor. In most patients, malignant melanoma of the hand is already at an advanced stage when diagnosed.

REFERENCES

- [1]. Zuozhang Y, Lin X, Yunchao H, Hongpu S, Tao Y et al. Clinical features of malignant melanoma of the finger and therapeutic efficacies of different treatments. *Oncology Letters* 2011; 2: 811-815.
- [2]. Sinno S, Wilson S, Billing J, Shapiro R, Choi M. Primary melanoma of the hand: an Algorithmic approach to surgical management. *J Plast Surg Hand Surg* 2015; 49(6): 339-345
- [3]. Faruk T, Kayhan E. Widespread finger skin metastasis of melanoma. *Clinical case Reports* 2018; 6(2): 448-449.
- [4]. Pietro G, Maria S, Daniela C, Gaspare G, Vittorio G, et al. Gastric and rectal metastasis from malignant melanoma presenting with hypo chromic anemia and treated with immunotherapy. *Case Reports in Oncological Medicine* 2017; 4. Doi:10.1155/2017/2079068.

- [5]. Masuki Y, Shigeru K, Akira K. Primary umbilical malignant melanoma: report of a case. *Acta Med Kinki Univ* 2011; 36(1): 33-36.
- [6]. Vedat G, Feyzullah U, Serdar Y, Sezgin B, Serdar I. Malignant Melanoma of the Stomach presenting in a woman: a case report. *Journal of Medical case reports* 2011; 5: 94-97.
- [7]. Katherine W, Sam WS, Abhijit SB, Irene I, Elizabeth AA. Melanoma with gastric metastasis. *Journal of Community Hospital Medicine Perspectives* 2016; 6: 31972.
- [8]. Blecker D, Abraham S, Furth EE, Kochman ML. Melanoma in the gastrointestinal tract. *Am J Gastroenterol* 1999; 94: 3427-3433.
- [9]. Meini JG, Bailin PL. Primary melanoma of the Umbilicus: Report of a case and review of the relevant anatomy. *Dermatol Surg* 2003; 29: 404- 407.
- [10]. Suhail F, Scott K, Alexandra H, Gehad G. A case of gastric metastatic melanoma 15 years after the initial diagnosis of cutaneous melanoma. *Case Reports in Gastro intestinal Medicine* 2018; doi: 10.1155/ 2018/ 7684964.