RARE Case Report of Primary Gastric Melanoma

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ABSTRACT

Gastric melanomas are usually metastatic, and primary is almost rare entity.

Present case is a rare malignant melanoma of the gastric region with barely reported cases in the literature. A 65 year old male presented with pain abdomen and melaena. He was evaluated with relevant investigation. UGI endoscopy and PETCT shows large polypoidal irregular gastric mass in the proximal curvature extending upto gastroesophageal junction. Endoscopic biopsy a ulcero-infiltrating tumour, Individual cells are large, round, having moderately pleomorphic, hyperchromatic nuclei with prominent eosinophilic nucleoli and moderate eosinophilic cytoplasm. Immunohistochemistry of S100 and HMB45 was positive and negative for CK7 and CK20.

Early diagnosis of primary gastric melanoma allows for better prognosis of the patient from the right intervention.

Keywords: Melanoma, primary, Gastric.

Submitted : March 10, 2021

Published : March 31, 2021

ISSN: 2593-8339

DOI: 10.24018/ejmed.2021.3.2.763

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I. INTRODUCTION

Digestive tract melanomas are rare, typically occurs in anogenital region. Less common location involves oesophagus, stomach, intestine and gallbladder. Primary melanomas are considered as cutaneous neoplasm and extracutaneous presentation is very uncommon and often primary site is difficult to identify.

The pathogenesis of primary mucosal melanoma are environmental, immune, hereditary risk factors and association with other co morbidities, however, with no proven concurrences [1].

II. CASE REPORT

A 65 year old male presented with pain abdomen and melaena since 15 days. He was evaluated with relevant investigation. UGI endoscopy revealed large, nodular, proliferative, ulcerated, friable fleshy growth seen in the fundus (Fig. 1).

Fig 1. Endoscopic view of nodular proliferative lesion in the fundus.

PETCT shows large polypoidal irregular gastric mass in the proximal curvature extending up to gastroesophageal junction. Endoscopic biopsy was taken and measuring 0.4×0.2×0.1 cm.

III. OBSERVATION

A. Microscopic Findings

Histological examination showed gastric mucosa with ulcero-infiltrating tumour (Fig. 2), Individual cells are large, round, having moderately pleomorphic, hyperchromatic nuclei with prominent eosinophilic nucleoli and moderate eosinophilic cytoplasm (Fig. 3). Many atypical mitosis noted. Differential diagnosis of poorly differentiated adenocarcinoma and malignant melanoma was offered.

Fig. 2. Histopathological examination of the tumour: Low power view of the ulcerated mucosa with tumour.

Fig. 3. The cells are round to oval cells with prominent eosinophilic nucleoli and moderate eosinophilic cytoplasm in B. (H and E, 40X).

B. Immunohistochemistry Findings

The neoplastic cells are positive for S100 (Fig. 4), HMB45 (Fig. 5) and negative for CK7 and CK20 (Fig. 6) and this confirmed the diagnosis of malignant melanoma at rare site.

Fig. 4. Immunohistochemical staining: Tumour cells show positive for S100.

Fig. 5. Tumour cells show positive for HMB45.

Fig. 6. Tumour cells show negative for CK7.

A final diagnosis of primary malignant melanoma at an unusual site was confirmed.

IV. DISCUSSION

Melanomas at intestine and stomach are mostly metastasis rather than a primary tumor.

The criteria for diagnosis of primary gastric melanoma include: A lesion in the stomach must be proven by histopathological examination, absence of lesions elsewhere on the body, negative personal history for melanoma and disease-free survival of at least, 12 months after curative surgery [2]-[4]. However in our case patient is on neo adjuvant chemotherapy, follow up is not complete.

Etiology of these primary gastric melanomas is unknown. There are two theories suggests the formation of primary melanoma lesions in the alimentary tract. The theory of possibility is the transformation of nerve cells from the APUD family (amine precursor uptake and decarboxylation) into melanocytes, which then undergo neoplastic transformation [5].

The second theory could be possibility of melanocyte precursor migration into the digestive tract. This hypothesis is based on observations of benign melanosis, which may be accompanied by the development of gastrointestinal tumours [6].

Most common symptoms of primary melanoma are weight loss, upper gastrointestinal bleeding, and anaemia. Upper GI endoscopy and biopsy with positive immunohistochemical stains for S100 protein, Melan-A, and HMB-45 antibodies are crucial role in diagnosis [7], [8]. The tumour in the present case presented with similar clinical scenario and immunohistochemistry positive for S100 and HMB45.

The prognosis of the tumour depends on the factors such as stage of the tumour, failure to perform surgical resection,

lymph node status, age and other co morbidities. The median survival time is five months [1], [7]-[9].

V. CONCLUSION

Early diagnosis of primary gastric melanoma allows for better prognosis of the patient from the right intervention.

ACKNOWLEDGMENT

The authors express their gratitude to patient and authorities, Apollo hospital Seshadripuram for cooperating in the work.

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