

Esophageal Melanoma: A Case Report

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Citation

S Pattari, L Rajesh, A Das, N Kakkar, V Gupta. *Esophageal Melanoma: A Case Report*. The Internet Journal of Gastroenterology. 2003 Volume 3 Number 1.

Abstract

Primary malignant melanoma of the esophagus is a rare neoplasm with a fatal prognosis^[1]. So far 240 cases have been reported in World literature. The incidence of esophageal is less than 0.2% of all esophageal neoplasms^[2]. Here we are presenting a case of esophageal melanoma with available literature review.

margins of esophagus were free of tumor. There was no lymphnode involvement.

CASE REPORT

A 45 year old male presented with dysphagia to solid food since last 5 months along with weight loss. He had no other symptoms. Endoscopy showed a polypoidal mass projecting into the lumen of the esophagus. The mass was black in color and measures 5 4 cm. The biopsy from the mass was taken and histopathological examination was performed. The biopsy showed nests and sheets of cells with pleomorphic vesicular nuclei and prominent eosinophilic nucleoli. Melanin pigment was also noticed. The case was diagnosed as esophageal melanoma. Subsequently esophagectomy was done.

The gross examination of esophagectomy specimen showed a polypoidal tumor arising from mucosa (Figure 1) and measures 8 3 2 cm with a stalk measuring 1 cm diameter. The cut surface was brownish black in color. Another small tumor nodule measuring 1.2 cm diameter was also seen 2 cm away from main tumor. Microscopically the tumor cells were arranged in nests, sheets as well as short fascicles. The tumor cells were round to oval with moderate pleomorphism having vesicular nuclei, prominent eosinophilic macronucleoli and moderate amount of cytoplasm (Figure 2). Abundant melanin pigment was seen within the tumor cells (Figure 3) which was confirmed by Schmorl staining which stains melanin green. In addition many foci of in situ components alongwith transepithelial migration of tumor cells were also seen (Figure 4). The tumor was restricted to mucosa and submucosa only. The muscular propria and adventitia were uninvolved by the tumor. The resection

Figure 1

Figure 1: Polypoidal mass projecting into the lumen of the esophagus.



Figure 2

Figure 2: The tumor cells were round to oval with moderate pleomorphism having vesicular nuclei, prominent eosinophilic macronucleoli and moderate amount of cytoplasm (H&E 550).

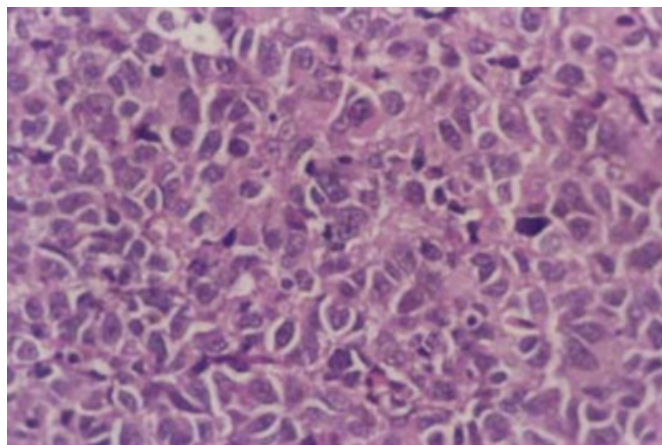


Figure 3

Figure 3: Abundant melanin pigment was seen within the tumor cells (H&E 140).

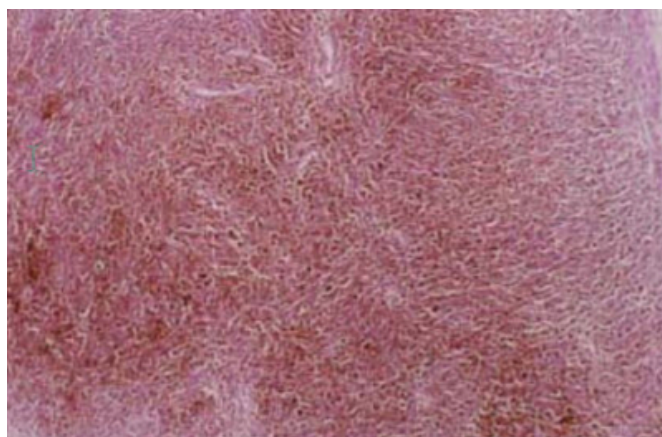
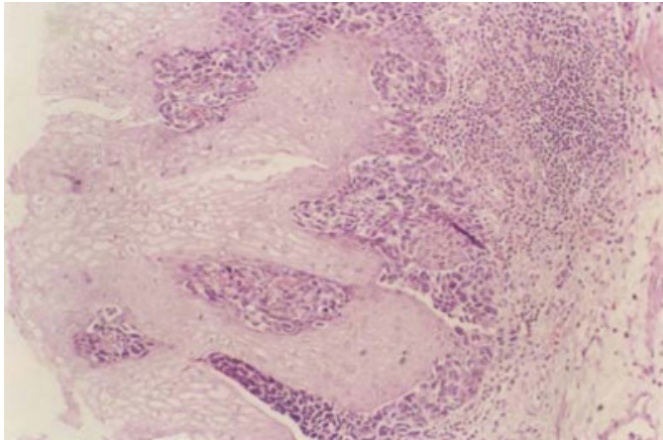


Figure 4

Figure 4: In situ component in adjacent epithelium (H&E 280).



DISCUSSION

Primary esophageal melanoma is rare. So far, around 240 cases have been reported in English literature (medline search). Most of them are case reports, however few small series are also available^[3,4,5]. A total of 1760 esophageal malignancies were reported in last six years from our Institute and we found only single case of melanoma.

Esophageal melanoma usually occurs in adult and present with dysphagia. Although massive hematemesis can be the presenting feature^[6]. Our case presented with dysphagia to solid food only. Primary esophageal melanomas have characteristic barium study findings, appearing as bulky, polypoid intraluminal masses that focally expand the esophagus without causing obstruction^[3]. In our case, barium study was not performed. However, endoscopic examination showed polypoidal intraluminal mass. The histological findings were classical of melanoma. There was abundant melanin pigment production. However sometimes in amelanotic variant, there is no melanin production, which is very difficult to distinguish from poorly differentiated

carcinoma and special stain for melanin or immunohistochemistry with S-100, HMB-45, Melan-A etc are needed to confirm the diagnosis. One prominent histological finding in our case is in-situ changes which indicates its primary in nature. The esophageal melanoma is an aggressive tumor. The five year survival of primary malignant melanoma of the esophagus is around 5%^[7]. However early esophagectomy can result in a 5-year survival rate of up to 37% of cases. The chemotherapy, immunotherapy and radiation therapy currently have no major role in treatment^[8].

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