Rare Presentation Of Cutaneous Metastasis From Esophageal Carcinoma: A Case Report

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ABSTRACT

Introduction: Esophageal Carcinoma is eighth in position by incidence and sixth in position in cancer related deaths. The prevalence of disease is more in less developed countries. Carcinoma of esophagus mostly metastasizes to liver and lungs. Malignant melanoma, lung and breast cancers are most common cancers metastasize to skin. It is very rare for the esophageal cancers to metastasize to skin.

Case report: We report a case presented with difficulty in swallowing for which he was evaluated and diagnosed as a case of squamous cell carcinoma of esophagus. He received concurrent chemo radiotherapy with cisplatin given simultaneously along with radiation. He was later developed skin nodules over ala of nose, neck and chest wall. Fine needle aspiration cytology showed metastatic deposits of squamous cell carcinoma. He received palliative chemotherapy. Within a month he was expired at home for reasons unknown.

Conclusion: The main focus of reporting this case is to emphasize the rare presentation of carcinoma esophagus to skin. Though the survival of patients with cutaneous metastasis from esophageal carcinoma is very dismal, physicians should be cautious regarding the varied presentations of esophageal carcinoma and not to ignore any clinical finding so as miss the final diagnosis which alters the treatment.

Keywords: Esophageal carcinoma, Cutaneous metastasis, Radiotherapy

INTRODUCTION

Esophageal cancer is the eighth most common cancer worldwide (3.2% of total) and the sixth leading cause of cancer related deaths (4.9% of total).[1,2] Esophageal cancer incidence rates in men are more than double those in women (2.4:1). There are two types in esophageal cancers, Squamous cell carcinoma and Adenocarcinoma. Lungs and liver are most common metastatic sites of esophageal cancers.[1] The cancers most commonly metastasize to skin are lung, breast and malignant melanoma.[1,2] It is very rare for the esophageal cancers to metastasize to skin.[1] The aim of present case study is to focus on rarest possible presentations of the carcinoma esophagus and to be vigilant in examining the patient and not to ignore any finding which may lead to incorrect diagnosis and treatment.

CASE REPORT

A 38 year-old male presented to oncology OPD with chief complaints of difficulty in swallowing since 2 months, more for solids than liquids and loss of appetite since 2 weeks. He was examined thoroughly and was investigated. An esophagram or barium swallow was done. Irregular filling defect with narrowing was noted in mid esophagus. Upper GI endoscopy showed ulceroprolifearative growth noted in mid to lower esophagus (30 -38cm from level of incisors). Multiple biopsies were taken and sent for histo-pathological examination. CT scan of the chest showed ill-defined circumferential intramural mass lesion involving retro-cardiac segment of esophagus with maximum thickness of 1.3cm extending for a length of 5.8cm.Chest Roentgenogram was normal. CT Scan abdomen and pelvis was normal. Histopathology report from the biopsy showed Squamous cell carcinoma (figure:1). Thus, a diagnosis of carcinoma of esophagus was made. Patient was planned to receive concurrent chemoradiotherapy with cisplatin 40 mg/m2 along with radiation treatment.
Patient was planned to receive conformal radiotherapy with total dose of 50.4Gy along with four cycles of weekly cisplatin of 40mg/m2. Patient tolerated treatment very well and discharged from hospital. Two months later he presented to oncology OPD with multiple skin nodules over right ala of nose, right side of neck and on anterior chest wall. Fine needle aspiration cytology from skin nodules showed metastatic deposits of Squamous cell carcinoma(Figure 2 and 3). He was further investigated and found no other metastasis. He was planned to receive palliative chemotherapy with cisplatin and 5FU based regimen. Patient took one cycle of chemotherapy and expired within one month.

DISCUSSION

Esophageal carcinoma is next to lung, breast and colorectal cancers in incidence. Most common metastatic sites for esophageal carcinoma are lungs, liver and retroperitoneal lymph nodes. It rarely metastasizes to skin and the incidence is less than 0.5% as per the studies.[1] Cutaneous metastasis from other internal cancers is around 0.5 to 9%. Most common cancers that metastasize to skin are lung, breast, colorectal and malignant melanoma.[5] Both types of Esophageal carcinoma can metastasize to skin but Adenocarcinoma of esophagus is slightly more prone to cutaneous metastasis. It was reported that the median survival of patients with cutaneous metastasis from squamous cell carcinoma is around 4.7 months.[6] The clinical presentation of metastatic skin lesion may vary

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from macules, papules or nodules or mixed types like maculo-papular or papulo-nodular types.[2]

Esophageal carcinoma is associated with high mortality and cutaneous metastasis is very rare. A meta analysis of cutaneous metastasis was done from patient tumor registries and autopsy registries. It was found that overall incidence of cutaneous metastasis was 5.3% and breast cancers mostly metastasize to skin and also chest was the common metastatic site.[7] As the cutaneous metastasis from esophageal carcinoma is very rare, the literature has limited data regarding the incidence. There are few studies conducted in the past regarding the incidence of cutaneous metastasis.Lookingbill et al, conducted a retrospective study, in which they found only 3 cases of cutaneous metastasis from esophageal carcinoma and also reviewed the patients with cutaneous metastasis, of which most of them were from breast carcinoma and malignant melanoma.[8] Schoenlaub et al, studied the clinical findings and the survival of 200 patients with cutaneous metastasis from different cancers and found that the incidence of cutaneous metastasis from esophageal adenocarcinoma was only 2 out of 200 cases. They also found that the median survival of patients with skin metastasis was only 4.7 months.[9] Reingold reported 32 cases of cutaneous metastasis from clinical and necropsy findings, from 2300 cases of internal malignancies. Lung cancers were the most common primary site and only one case showed cutaneous metastasis from esophageal carcinoma. The chest wall and abdomen were the common sites for the cutaneous metastasis.[10]

The diagnosis of cutaneous metastasis is often difficult. Fine needle aspiration cytology and biopsy of the suspected lesion may help in the diagnosis. Sometimes the Immunohistochemistry also helpful in the final diagnosis. There were few case reports published till now with cutaneous metastasis of esophageal carcinoma.Iwanowski et.al published a case of 51-year-old man presented with extensive skin nodules all over the body, for which he was investigated and found to have esophageal squamous cell carcinoma. He received palliative chemotherapy with cisplatin and 5FU based regimen and three cycles later the existing skin lesions became small but some new skin lesions appeared in other areas. They concluded that skin lesions if diagnosed early lead to better treatment.[1] JM Park et al, reported a case of adenocarcinoma of esophagus in a 58 year old woman. She underwent total esophagectomy. Seven months later she developed hard nodule in the scalp which showed metastatic deposits adenocarcinoma. They concluded that the dermatologists must be aware of the possibility of cutaneous metastasis from esophageal carcinoma patients.[2] Herbella et.al, reported two cases of cutaneous metastasis from esophagus. One case was metastatic deposits of squamous cell carcinoma from mid esophageal squamous cell carcinoma and other case was metastatic deposits of adenocarcinoma from lower esophageal adenocarcinoma. In both cases patients were initially diagnosed as carcinoma of esophagus. Later developed skin nodules, biopsy of which showed metastatic deposits of carcinoma. They concluded that the presence of Cutaneous metastasis denotes an advanced disease and the survival of patients with cutaneous metastasis is very low with an average duration of 4 months.[3] Recently chauhan et al, reported two similar cases

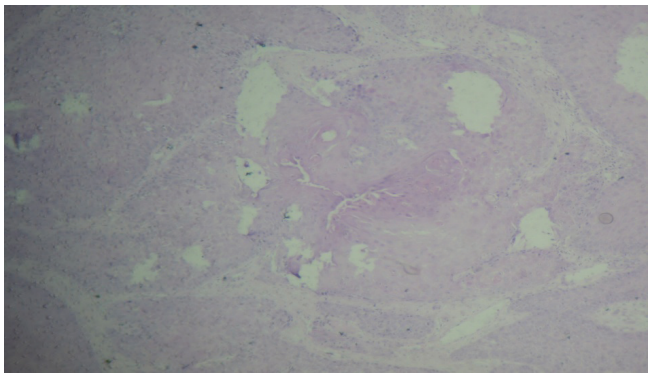

Figure-1: Histology slide showing acanthosis with elongated Rete ridges extending into sub epithelium as nests and few of nests show attempted keratin pearls formation

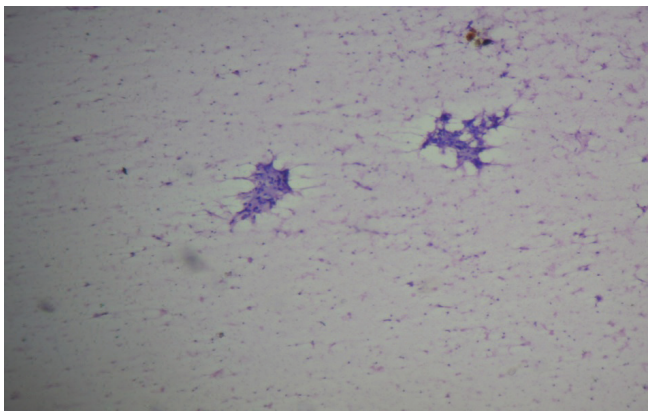

Figure-2: Low power cytology slide showing clusters of squamous cells with moderate to abundant esinophilic cytoplasm with hyper chromatic nuclei with moderate anisonucleosis and attempted keratin pearls formation.

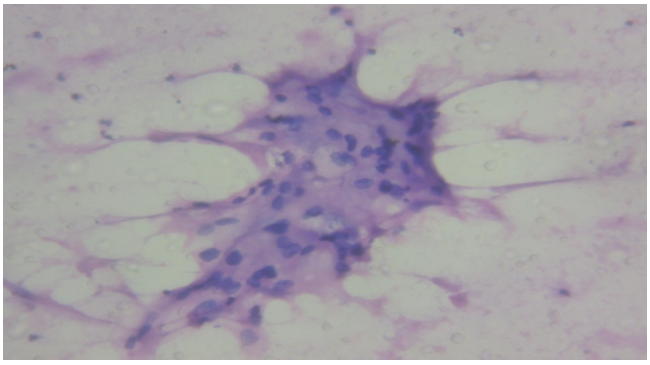

Figure-3: High power view of slide showing clusters of squamous cells moderate to abundant esinophilic cytoplasm with hyper chromatic nuclei with moderate anisonucleosis and attempted keratin pearls formation.

of skin metastasis from esophageal carcinoma. One case was presented with diffuse skin nodules all over the chest. Biopsy of the skin lesions showed metastatic deposits of squamous cell carcinoma. Patient was further evaluated and found to have esophageal squamous cell carcinoma. Another case was presented with solitary skin nodule over arm. Biopsy of the skin nodule showed metastatic deposits of squamous cell carcinoma. Patient was further evaluated and found to have esophageal squamous cell carcinoma. They concluded that the two cases highlight a rare presentation of metastases

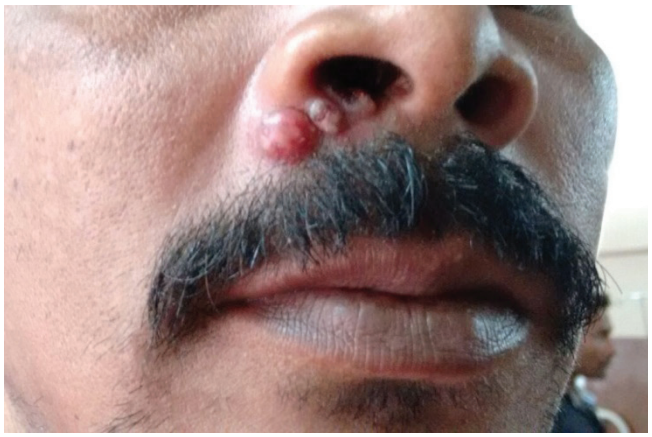

Figure-4: Clinical photo of patient with metastatic skin nodules.

from esophageal cancer and that physians are advised to consider an underlying solid organ cancer when confronted with an apparent primary cutaneous lesion.[4]

In our case, patient was a known case of carcinoma esophagus who had taken treatment with concurrent chemoradiotherapy. Patient was discharged from hospital and later presented with small skin nodules at multiple sites. Though there were no other metastatic involvement of rest of the organs, cutaneous metastasis represent the disease wide spread status and dismal prognosis. Patient was died within a month of diagnosis of cutaneous metastasis which shows very dismal survival cutaneous metastasis in esophageal carcinoma.

CONCLUSION

Cutaneous metastasis from esophageal carcinoma is very rare. Often patients present with only skin manifestations without underlying features of malignancy. Those manifestations should not be ignored and addressed thoroughly. It may appears that the prognosis of cutaneous metastasis from esophageal carcinoma is worse than visceral metastasis.

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