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Cutaneous Metastasis in Postoperative Head and Neck Malignancies in Tertiary Care Centre

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ABSTRACT

Background: Cutaneous metastasis is important although with infrequent occurrence in clinical practice. Our study was done on post-operative head and neck malignancies. Materials And Methods: This is a presentation of 5 consecutive patients with diagnosis of cutaneous metastatis of primary head and neck malignancy at Sri Aurobindo Institute Of Medical Sciences,Indore. They were studied in an attempt to evaluate the significance of cutaneous metastatic nodules in relation to poor prognosis and mortality. Conclusion: The spectrum of reported cases comprised of localised nodules over skin and by subjecting them for histological evaluation proved metastatic . Clinicians are urged to show renewed interest on metastatic cutaneous nodules in view of poor prognosis and mortality.

KEYWORDS Head and Neck Malignancy, Metastatic nodule

Introduction:
Cutaneous metastases arising from primary carcinomas though rare are important findings in clinical practice [1] [2] . Head and neck malignancies account for approx. 15% of all skin metastasis . It is reported to occur in 0.7% - 5% of cancer patients [3], some have reported up to 9% [6], and others 10.4% [7] . Skin metastasis patients have only a median survival of 3 – 6 months [4,5].Risk factors identified include 2 or more lymphnode metastasis, extracapsular spread of nodal metastasis[5] . Clinical findings may be barely noticeable and require a high index of suspicion [2]. Skin metastasis presents commonly as skin nodules (single or multiple), usually painless and may mimic dermatofibroma, neurofibroma, lipoma and granuloma [1] [2] [8]. Diagnosis is based on histopathological examination of cutaneous nodule[1]. In addition, immunohistochemistry provides a useful adjunct in confirmation of the primary tumor [2] [9]. It is difficult to treat, surgical excision may give, short term palliation [2] [3]. We present this study to show the significance of cutaneous metastasis to clinicians in terms of poor prognosis and mortality.

RESULTS:
Total of 104 cases of head and neck malignancy were operated during the period of May 2015 to May 2016 in Surgical Oncology department,Sri Aurobindo Institute Of Medical Sciences,Indore .

5 cases of cutaneous metastasis were reported. 4 patients underwent full course adjuvant radiotherapy and one patient did not receive any adjuvant treatment after surgery.

2. CASE SERIES:
Case 1.
54 year old female ,presented with diagnosis of Carcinoma right lower alveolus with clinical stage T4aN1 had undergone surgery on 21/7/2015 and final histopathology report was suggestive of Moderately differentiated Squamous cell Carcinoma (Intermediate grade) $T_4N_2M_X$.Later she had received concurrent Chemotherapy and Radiotherapy postoperatively and. She was on followup and presented with swelling over lower back region in 2 months interval, which was excised and suggestive of metastatic squamous cell carcinoma.

Case 2.
34 year old young male presented with swelling in left parotid region and fnac suggestive of carcinoma left parotid underwent left radical parotidectomy and left radical neck dissection on 14/9/2015. Final histhopathology report was suggestive of High Grade Mucoepidermoid Carcinoma with Involvement of Soft Tissue and Cervical Lymph nodes. TNM stage – $T_4N_2M_X$

He received postoperative concurrent chemotherapy and radiotherapy and later presented with cutaneous nodule over anterior chest wall in one month and FNAC suggestive of metastatic squamous cell carcinoma .

Case 3:
48 year old male patient presented with Carcinoma rt.buccal mucosa with clinical stage T4aN1 and underwent wide excision of tumor with right hemimandibulectomy and right mrnd on 19/11/2015 and final histopathology report was suggestive of Well Differentiated Squamous Carcinoma (Grade I) - Right buccal mucosa; with Margin positive.TNM stage – $T_4N_0M_X$ and later he was defaulter of radiotherapy after receiving 20# postoperatively. After 4 months he presented with recurrence over upper lip on right side and later operated i.e.wide excision and crossed (opposite) pmmc reconstruction done. Patient was on followup and presented with skin nodule over right post –auricular region ,FNAC of nodule s/o metastatic squamous cell carcinoma on 13/5/2016 and he is still on follow-up.

Case 4:
58 year old male patient diagnosed as biopsy proven Carcinoma left lower alveolus with T4aN1 on 25/12/2015 and had past history of Carcinoma left upper alveolus for which he was operated in 2008 (wide local excision with left upper alveolectomy) and later received full course radiotherapy . Now he was operated on 1/1/2016 (wide excision+left rnd+left hemimandibulectomy+left pmmc & dp flap reconstruction) and histopathology report was suggestive of – squamous cell carcinoma Left lower alveolus, with involvement of skin and bone with metastasis in (12/16) lymph nodes. TNM stage – $T_{4a}N_{2b}M_X$. Later he presented with swelling in right post auricular region and FNAC suggestive of metastatic squamous cell carcinoma.

Case 5:
Year old male diagnosed as Carcinoma tongue 10 months back and received 6 cycles of chemotherapy (cisplatin and paclitaxel last on 17/2/2016) and presented to our department with clinical T4aN2b stage and was operated on 22/3/2016 i.e. total glossectomy+b/l mrnd+ left pmmc reconstruction and final histopathology suggestive of Moderately Differentiated Squamous Cell Carcinoma (Grade-II) Perineural invasion is noted, lymph nodes (6/11) – show tumor metastasis. $T_3N_{2C}M_X$ .Later he received radiotherapy and presented with skin nodule over upper back on 25/4/2016 which was suggestive of metastatic nodule.

3.DISCUSSION:
The total number of cutaneous metastasis during follow up period that presented in our department was 5(4.8%) cases. Aksoy S et al. reported a frequency of cutaneous metastasis that ranged between 0.7% and 10.4% of all patients with head and neck malignancies . But our study is an unique one in presenting skin metastasis post treatment of primary malignancy of head and neck region. Cutaneous metastasis may occur at any time in the course of the malignancy and spread may follow, direct extension, lymphogenous, intravascular dissemination or surgical implantation .The majority of cases were males .Average interval between initial presentation and skin metastasis is less than 6 months .All the cases presented initially were in Stage IV. All the cases had undergone surgery. 4 cases received adjuvant concurrent chemo radiotherapy and 1 case was defaulter.

The outcomes were generally poor,4 cases recorded mortality, while one was on follow up . Mortality rate is high;. Overall survival has been reported between 3 - 6 months in keeping with this report · Others have reported median survival of 6.5 months after cutaneous metastasis and 50% of patients die with in 6 months with cutaneous metastasis.

CONCLUSION:
Cancer patients should be made aware of skin changes during follow-up.Cutaneous metastasis is a very poor prognostic sign and it should be taken as a renewed interest by surgeons as it is associated with rapid dissemination of disease, poor prognosis and mortality.

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