ORIGINAL RESEARCH PAPER

Volume-7 | Issue-2 | February-2018 | PRINT ISSN No 2277 - 8179

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

CUTANEOUS METASTASIS FROM HEAD AND NECK SQUAMOUS CARCINOMA: A REPORT OF 2 CASES

Pathology

Dr. Argha Baruah* *Corresponding Author

Dr. Shilpa MD

Dr. TN Suresh

Dr. SM Azeem Mohiyuddin

ABSTRACT

Cutaneous metastasis in head and neck carcinoma is extremely rare and is accompanied with poor outcome with a very low average survival. We present two cases of head and neck squamous cell carcinoma presenting with cutaneous metastasis.First case was of a 58year old male who was a treated case of squamous cell carcinoma of posterior cricoid regionpresented with a swelling on scalp and second case was of a 56 year old male who was a post operative case of Squamous Cell carcinoma Right buccal mucosa and had undergone 2cycles of CT RT presented with swelling in scalp and abdomen.Cytological examination was done and was reported as metastatic deposit from SCC.These 2 cases highlights the rare occurrence of cutaneousmetastasis from SCC of head and neck

KEYWORDS

Introduction

Cutaneous metastasis are most frequently seen with breast ,lung, colon cancer and melanoma.Head and neck cancer metastastasis is very uncommon with an incidence of 0.8 -1.3%.[1] Hypo- and oro-pharyngeal malignancies constitute about 1.1% of all malignancies in the world and about 3.8% of all malignancies in India.[2] Oral SCC are the most common head and neck malignancy but incidence of skin metastasis is around 5% in Oral SCC .Of the head and neck cancers , laryngeal cancer is most often seen to be associated with cutaneous metastasis.[3].We report two cases: A case of Post Cricoid Squamous Cell Carcinoma with metastasis to the scalp and a case of buccal mucosa Squamous Cell Carcinoma with metastasis to the scalp and abdomen.

Case report:

CASE 1:58year old male had history of difficulty in swallowing to both solids and liquids and also had a history of change in voice since 15days .CECT neck was done and a diffuse heterogeneously enhancing soft tissue density thickening involving right post cricoid hypopharynx extending into bilateral right pyriform sinuses was seen and circumferential enhancing wall thickening and luminal narrowing of upper cervical esophagus was noted. Multiple enlarged cervical lymph nodes with necrotic core were identified and was later adviced biopsy from the growth over posterior cricoid region in which the histopathological examination revealed Squamous cell Carcinoma.. Patient was given 3 cycles of NACT chemotherapy. He underwent a procedure in which using - Savary Gillard dilators insertion of Ryle's tube was done followed by radiotherapy and was followed by 5 cycles of chemotherapy and later he got discharged.After 45 days he presented with nodule over the scalp and breathlessness.On examination swelling on the scalp was firm measuring 2.5x2.5cm . FNAC was done from the swelling and smears revealed tumor cells arranged in groups having pleomorphic nuclei and moderate cytoplasm with angulated borders and was reported as Squamous Cell Carcinoma-Metastasis to skin .The patient was admitted in SICU for respiratory distress and he got discharged against medical advice due to financial constraints.

CASE 2: 56 year old male patient who was a post operative case of Right buccal mucosa and had undergone right hemimandibulectomy followed by 2cycles of CT RT presented with swelling in scalp and abdomen since 1 month.The swelling on the scalp was 2x3cm firm in consistency and nonmobile.The swelling on the abdomen was 4x3cm ,cystic in appearance and soft in consistency.FNAC from scalp swelling aspirated 0.3ml of blood tinged material.FNAC from abdomen swelling aspirated 5ml of blood tinged cystic material. FNAC of both the sites was reported as Squamous cell carcinoma-metastasis to skin

Discussion

Among head and neck malignancies which metastasize to skin, oral cavity tumors contributes to 5%, hypopharyngeal tumors and other pharyngeal tumors contributes to 1%.[4] The two cases reported had primary tumor in posterior cricoid region and buccal mucosa .The site of skin metastasis in SCC of the head and neck are variable .The sites in descending order with incidence are chest wall and abdomen being most common followed by extremities (12%), neck (11%), back (11%), scalp (7%), pelvis (6%) and face (5%). [5] First case which presented with scalp swelling is rare site for metastasis.Other case had metastastasis in both abdomen and scalp.Cutaneous metastases from SCC commonly presents as painless nodules or erythematous macular lesions and they can be easily confused as an infective process or primary cutaneous squamous cell carcinomas [1,5] .

Scalp swelling in both the cases presented as a firm nodular swelling which were painless.But the abdominal swelling of Case 2 was soft in consistency and painless.The average time of onset of metastasis following the diagnosis of SCCHN ranges from 1 to 39 months with three quarter of cutaneous metastases appearing by 18 months . [6]But our both cases were unique since both showed early presentation within 1 to 1 ½ month of follow up and after receiving the treatment. It has been stated that cutaneous metastasis are thought to develop distally it is through hematogenous spread and if they occur in close proximity it is through dermal lymphatics. Skin metastasis from internal malignancies range from 0.7-10% and most commonly associated with breast and lung cancer.[7] In a study it has been stated that pulmonary circulation is possibly bypassed via the azygous and vertebral venous system and batson's plexus and hence skin implantation and since the tumor cells survive the filtration process of the pulmonary circulation and therefore metastasize to distant skin sites[8].Our both the cases showed distant metastasis so it was more likely to be hematogenous spread..The diagnosis of cutaneous metastasis is mainly done by cytological and histological examination .Our both the cases was diagnosed by cytological examination which showed SCC metastasis to skin.In both the cases primary tumor was reported on histopathology as well differentiated SCC. The prognosis of cases with cutaneous metastasis is extremely poor and in a study it was reported the length of survival was approximately 3 months after detection of skin metastasis.[9]In a study it has been stated that only $1/3^{rd}$ of patients developing distant metastasis survive when compared to patients who donot develop distant metastasis. The treatment of cutaneous metastasis is inconclusive and in general it is palliative. In a study it was found that surgical excision has shown to increase survival time.[10]

Depending on the clinical condition and type of metastasis surgical excision RT and CT can also be given.In solitary skin metastasis local

wide excision can be done and in multiple metastasis only palliative treatment is given.In our both the cases we lost follow up and did not have any information on the survival status of both the patients.

Conclusion:

Cutaneous metastasis in head and neck carcinoma is extremely rare and is accompanied with poor outcome with a very low average survival. Prognosis also depends on the primary site of tumor ,type of presentation of skin metastasis,duration ,treatment and type of presentation of skin metastasis.Due to lack of data in the literature regarding cutaneous metastasis in head and neck cancers a larger number of studies are required to solve the number of questions which still remain unanswered .

FIGURE 1:Case 1 Photograph of swelling on scalp measuring 2.5x2.5cm

FIGURE 2: Case 2 Photograph of swelling on abdomen measuring 4x3cm

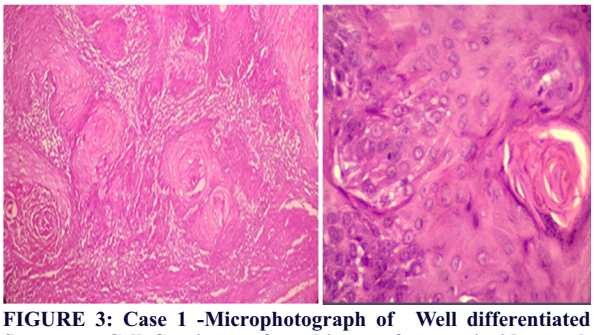

FIGURE 3: Case 1 -Microphotograph of Well differentiated Squamous Cell Carcinoma from biopsy of post cricoid growth (H&E 10x)

FIGURE 4: Case 2 Microphotograph of Well differentiated Squamous Cell Carcinoma from excised specimen(H&E 40x)

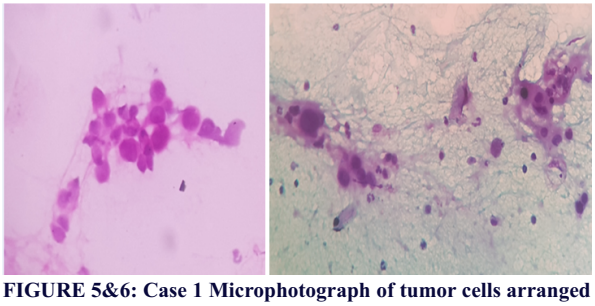

FIGURE 5&6: Case 1 Microphotograph of tumor cells arranged in groups with pleomorphic nuclei with angulated borders (H&E 40x)(PAP 40x)

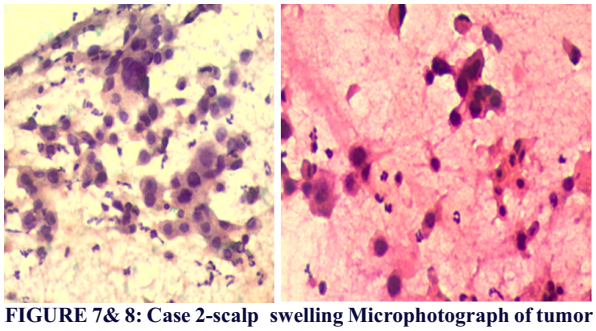

FIGURE 7& 8: Case 2-scalp swelling Microphotograph of tumor cells arranged in groups with pleomorphic nuclei with angulated borders. (PAP 40x) (H&E 40x)

References:

1. Pitman KT, Johnson JT. Skin metastases from head and neck squamous cell carcinoma: Incidence and impact. Head Neck 1999; 21:560–5
2. International Agency for Research on Cancer. Globocan: 2008. 3.El Khoury J, Khalifeh I, Kibbi AG, Abbas O. Cutaneous metastasis: Clinicopathological study of 72 patients from a tertiary care center in Lebanon. Int J Dermatol. 2014;53:147–58
4. Hsu LP, Chen PR. Distant metastases of head and neck squamous cell carcinomas - Experience from Eastern Taiwan. Tzu Chi Med J 2005;17:99-104
5. Krathen RA, Orengo IF, Rosen T. Cutaneous metastasis: a meta-analysis of data. South Med J 2003; 96: 164- 167
6. Yoskovitch A, Hier MP, Okrainec A, Black MJ, Rochon L. Skin metastases in squamous cell carcinoma of the head and neck . Otolaryngol Head Neck Surg 2001; 124: 248-252
7. Spencer PS, Helm TN. Skin metastases in cancer patients. Cutis. 1987; 39: 119-121
8. Batson OV. The role of the vertebral veins in metastatic processes. Ann Intern Med 1942; 16:38–45.
9. D.S. Berger, O.H. Fletcher. Distant metastasis following local control of squamous cell carcinoma of the nasopharynx, tonsillar fossa and base of tongue Radiology 1971;100: 141–143
10. R.D. Cole, W.F. McGuirt.Prognostic significance of skin involvement from mucosal tumors of the head and neck.Arch Otolaryngol Head Neck Surg 1995;121: 1246–1248