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Anterior abdominal wall Metastasis of Squamous Cell Carcinoma of tongue – A Case Report

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Abstract
Cancer of the oral cavity makes up approximately 30% of all head and neck region tumors. Skin metastasis usually occurs in the face and neck i.e near primary site. It's very rare to metastasis to anterior abdominal wall from carcinoma of tongue. We reported a case of carcinoma tongue, post total glossectomy and bilateral neck dissection followed by adjuvant EBRT (External beam radiotherapy) with concurrent chemotherapy (inj. Cisplatin) presented with Recurrent metastasic lesion at anterior abdominal wall along with bilateral lung metastasis.
Keywords: *anterior abdominal wall recurrence, carcinoma tongue, total glossectomy, EBRT.*

Introduction

Cancer of the oral cavity makes up approximately 30% of all head and neck region tumors. Skin metastasis is rare with an incidence ranging between 0.7% and 2.4%. Skin metastasis usually occurs in the neck, scalp, and over the skin near the primary site[1]. The most common mode of spread of SCCHN (Squamous cell carcinoma of Head and Neck) is via regional lymph nodes to the cervical drainage areas[2]. Other lymph node groups are rarely involved. Patients suffering from a squamous cell carcinoma (SCC) of the head and neck region with distant metastases generally have a very poor prognosis[3]. Moriya et al. (2004) recently reported on a patient suffering from a cardial metastasis of an oral SSC together with additional metastases in the liver, lung, spleen and kidneys[4]. Distant metastasis in the gluteal muscle of a 65-year-old patient suffering from a SSC of the larynx has been recently described[5]. Oo et al. (2004) have identified three patients with metastases in the axillary lymph nodes over a period of 20 years[6]. Mess et al. (1986) have reported on distant metastases which were localized in the carpal bones of the midhand and in the bones of the foot[7]. As per our knowledge, no case has been reported u to date on the manifestation of distant metastases of a SCC in the soft tissue of the anterior abdominal wall till now in the literature . Distant metastases to lung, liver and bone are via haematogeneous spread. Cutaneous metastas is are associated with poor

prognosis and advanced disease[8]. Distant metastasis of squamous cell carcinoma of tongue in peripheral skeletal muscle and adjacent soft tissue also reported by Ralf Smeets et al(2008).[9]. We report a case of carcinoma tongue, post total glossectomy and post EBRT and chemotherapy presented with anterior abdominal wall mass lesion and bilateral inguinal lymphadenopathy along with bilateral lung metastasis. Furthermore, we show an overview on the current literature on metastases originating from head and neck tumors [Table 1].

Table 1: Survey of the literature

Authors	Cases	Results (localization of distant metastases in %)
Probert et al. 1974 [24]	96 Patients with SCC, 31% OSCC	lung 65%, bone 25%, liver 24%, skin 14%, brain 13%, adrenal 8%, heart 7%, kidney 6%, peritoneum, mediastinum and soft tissue each 5%, esophagus 4%, spleen 3%, bone marrow 3%, thyroid 2%, prostate 1% and middle ear 1%.
Merino et al. 1977 [25]	546 patients with SCC, 21% OSCC	primary tumor orally or in the oropharynx: lung 52%, bone 20.3%, liver 6%, mediastinum 2.9%, lung and bone 3.3% and others 15.4%. Primary tumor in the nasopharynx: bone 54%, lung 23.8%; primary tumors of the fossa tonsillaris and of the basis of the tongue: metastases were primarily found in the liver (22% and 10.8% respectiveliy)
Papac et al. 1984 [26]	52 patients with SCC, 4% at the bottom of the oral cavity, 10% tumors of the tongue	lung 75%, bone 44%, liver 17%, skin 13%, brain 13%, adrenal 6%, heart 8%, kidney 10%, GIT 15%, mediastinum 10%, spleen 3% and thyroid 6%.
Troell et al. 1995 [27]	79 patients with SCC with a total of 145 remote metastases.	lung 45, bone 27, liver 11, mediastinum 10 and other localisations (adrenal, brain, pericard, kidney and thyroid) 7.
De Bree et al. 2000 [28]	17 patients with SCC, 34% OSCC	lung 71%, mediastinum 24%, bone 24% and liver 6%.
Leon et al. 2000 [29]	64 patients with SCC, 2% OSCC	lung/mediastinum 52%, bone 12%, liver 5%, a combination of lung with bone and liver or skin 31%.

Case Report

54 year old man presented in our OPD on 27/10/17 with history of ulceroproliferative mass lesion on right lateral tongue which crosses midline. size was about 3x3 cm .who underwent proper examination and investigation . On biopsy report it was moderately differentiated squmous cell carcinoma. Patient underwent total glossectomy and bilateral neck dissection on December 17. As per histopath report it was moderately differentiated squmous cell carcinoma with contralatral one neck node positive. Patient received EBRT 64GY in 32 fraction with concurrent injection cisplatin 50 mg weekly and received 3cycle injection cis-platin. After one month of follow up patient complained right iliac fossa pain. On examination there was hard, irregular, right iliac fossa mass with multiple bilateral inguinal lymph node, largest one is 1.5x 1.5 cm, hard mobile. On FNAC of right iliac fossa mass on 24/04/18, it was metastatic squmous cell carcinoma. On PET-CECT report (8 may 18) total glossectomy status. No focal abnormal FDG avid lesion is seen. No focal FDG avid lesion in bilateral neck. Multiple nodular lesion with central necrosis and some with cavitation are seen in both lung upper lobes, largest in left lung upper lobe 3.8 into 2.1 cm, SUV max 6.7. soft tissue density mass lesion with increased FDG uptake and central necrosis is seen in right internal oblique muscle at lower lateral abdominal wall. Measuring 4x2.4x3.4 cm, SUV max 11.4. In view of distant metastasis patient was planned for palliative chemotherapy in the form of injection cisplatin 50mg d1-d2 and injection 5-FU 1.5 mg d1-d2, 3 weekly. After 3 cycle of palliative chemotherapy there was complete response at anterior abdominal muscle mass lesion and bilateral inguinal node. In view of lung metastasis and poor tolerability of patien further injectable chemotherapy withheld & planned for oral tab Gefitinib 250 mg once a day. Patient was clinically normal at anterior abdominal wall but having lung mass in both upper lobe lung till the writing of this manuscript on 15/05/19 having a average general condition with KPS score of 80.

Discussion

Pitman et al reported that the development of cutaneous metastases are more common if two or more cervical lymph nodes metastases are present or there is extracapsular spread of tumour in the cervical nodes[10].

The occurrence of cutaneous metastases is associated with a very poor prognosis. Median survival from onset of cutaneous metastases ranges from three to seven months, with zero percent one year survival rate. The] Cutaneous metastases from SCCHN in contrast to other internal malignancies are rare and literature review indicates a much lower incidence of between 0.8-1.3 percent [8].

Distant metastases commonly develop before, during, and after treatment for head and neck squamous cell carcinomas. The lungs were the most-frequent location of distant metastases in patients with oral cavity can cer (54.3%), oropharyngeal cancer (50.0%), and hypophar-yngeal cancer (60.5%). Bone (57.6%) was the most co mmon site of metastasis in patients with Nasopharyngeal carcinoma, while laryngeal cancer tended to metastasiz e to the liver (80%)[2].

Cologlu et al reported that the pulmonary circulation can possibly be bypassed via the azygous and vertebral venous systems and Batson's plexus therefore allowing for skin implantations. They have also reported that tumour cells may survive the filtration process of the pulmonary circulation and thus metastasize to distant skin sites.[6] therefore allowing for skin implantations. They have also reported that tumour cells may survive the filtration process of the pulmonary circulation and thus metastasize to distant skin sites.(12)

Histologically, cutaneous metastases are distinguished from primary cutaneous squamous cell carcinom as by the presence of a heavy dermal component that has no connection with the epidermis. There may be associated necrosis, inflammation and lymphovascular invasion[11].

The occurrence of cutaneous metastases is associated with a very poor prognosis. Median survival from onset of cutaneous metastases ranges from three to seven months, with zero percent one year survival rate[1].

Treatment is palliative and surgical excision, radiotherapy and chemotherapy have all been used depen ding on the clinical circumstances[8]. Berger and Fletcher[13] in their study reported that length of survival was ap proximately 3 months after skin metastasis becomes clinically evident in HNSCC. The treatment intent is usually palliative with the available options being surgical excision, chemotherapy, External beam radiotherapy or a combination of these. It has recently been reported that some patients who suffered an untreated SCC of the head and neck region survived for more than five years. Studies in which the outcome of patients with a SCC who were not treated at all were compared to the outcome of patients who underwent a palliative therapy showed that the mean survival rate was 8.4 months larger in patients who underwent a palliative therapy[14]. However, other authors reported on prolonged surviving rates in some cases of untreated tumors of the head and neck [15,16,17,18]. Kowalski and Carvalho (2000, 2001) analyzed in a long-lasting retrospective study from 1953 to 1990 the clinical outcome of 808 patients with an untreated tumor of the head and neck [19, 20]. They reported that, in accordance with the above findings, patients, who did not receive any treatment, survived up to 4 years[21].

Conclusion

Anterior abdominal wall metastasis from HNSCC is hardly reported in literature. The appearance of new anterior abdominal wall lesions in patients of HNSCC mandates a vigilant history and thorough physical examination. All such lesions should be viewed with a high index of suspicion.

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