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BASALOID SQUAMOUS CELL CARCINOMA FOREARM- A RARE ENTITY.

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ABSTRACT

Basaloid squamous cell carcinoma (BSSC) is a rare and aggressive variant of squamous cell carcinoma (SCC) which is known to occur in the upper aerodigestive tract. The tumor may metastasize to regional lymph nodes, distant metastasis can occur in lung. We Present a case of 50 years female patient, who was seen in outdoor with an ulcerated lesion on left forearm. Biopsy from the edge of growth reported as Eccrine Poroma. Excision biopsy suggestive Basaloid squamous cell carcinoma. We intend to present this case, considering it's rarity.

KEYWORDS: Basaloid–squamous cell carcinoma, aerodigestive tract, Differential diagnosis, Prognosis, metastasis.

INTRODUCTION

Wain et.al first described Basaloid Squamous cell carcinoma (BSCC) in the upper aerodigestive tract in 1986. [11] BSCC is characterized by nesting, lobular and trabecular arrangement of small crowded cells with scanty cytoplasm, and hyperchromatic nuclei. The lobules of malignant basaloid cells often display peripheral nuclear palisading, high mitotic activity, comedo necrosis, small cystic spaces filled with mucinous material, which mimic other tumors like adenoid cystic carcinoma, small cell undifferentiated carcinoma, basal cell carcinoma and so there is a difficulty in differentiating these tumors from (BSCC). [2]

Common sites involved in (BSCC) are Larynx, Hypopharynx, tonsils, and base of tongue. Other less frequently affected sites are nose, paranasal sinus, external ear, submandibular region, esophagus, lung, anus, vulva, vagina, and the uterine cervix. [2, 3] So far, only 21 cases of BSCC of the nose and paranasal sinuses have been reported in the literature. [2, 3] Till date to best of our knowledge, no idea about the incidence of BSCC on the forearm. Although the existence of this malignancy has been reported in the skin as metastatic deposits and as primary tumors from the anus, penis, vulva, and external auditory canal, it is not been noted in other cutaneous sites. [3,4]

CASE HISTORY

A 50 years female, was admitted from outdoor with an ulcerated growth over the front of the forearm, of size 4 cms x 4 cms. Everted edges, floor showing signs of nonhealing ulcer, base is on the muscle, it was not fixed to the muscle. No restriction of wrist or elbow joint movements. It was non tender, and there were multiple

ipsilateral axillary lymph nodes of size more than 2 cms. Freely mobile, hard to firm in consistency. They belong to Level II, Level I of axillary lymph nodes. Considering the examination findings, it fits in the diagnosis of squamous cell carcinoma of skin. We did full thickness biopsy from the edge of the ulcerated lesion. Histopathology was Eccrine Poroma. We did investigations –routine and also investigations like X ray chest. Two weeks antibiotic course was given to see any response in ipsilateral axillary lymph nodes. We did not find any response to antibiotic therapy as far the lymph nodes in axilla. We did wide local excision with margin of about 2 cms. With complete ipsilateral axillary dissection. After excision of lesion the raw area was covered by a bilobed flap.

DISCUSSION

BSCC has been defined in the 2005 WHO blue book as an aggressive high grade variant of squamous cell carcinoma composed of both basaloid and squamous components.^[1] Wain et.al first described Basaloid Squamous cell carcinoma (BSCC) in the upper 1986^[1,2] Current aerodigestive tract in classification on these tumors suggest the tumour arises from totipotent cells in the basal layer of squamous epithelium. Review of recent literature reports that BSCC appears in both sexes but predominates in males between 60 and 80 years of age. Clinical signs and symptoms are not specific and related to tumor location. The most common site is head and neck, aerodigestive tract viz. Pyriform fossa. Association of BSCC with Viruses is controversial. Gross description of most reported BSCCs are flat, or elevated edge tumors with central ulceration. [1,3] Interestingly, these tumors are always associated with spindle cell component as the

www.ejpmr.com 573

third constituent. [4,5,6] Most seen histological pattern known are solid nets with the typical cell population, basaloid at the periphery and squamous at the center. Histology is the most reliable tool for diagnosis. In our case the initial diagnosis of Poroma/porocarcinoma was more in favour of squamous variant. But on Immunohistochemistry, BSCC expresses Cytokeratins and EMA. Many reports suggest where the author propose the high molecular weight Keratin 34ßE12 as the most useful marker of this tumor. [7,8]

The main histological component of BSCCs is basaloid, and so the most important differential diagnosis is the solid variant of adenoid cystic carcinoma. Basic difference between adenoid cystic carcinoma and BSCC is the adenoid cystic carcinoma does not show any tendency towards squamous differentiation, does contain myoepithelial cells and is essentially devoid of pleomorphic atypical cells, mitosis comedonecrosis. [8] The recognition of mucin positivity and true ductulo-acinar differentiation in adenosquamous carcinoma should resolve the dilemma.^[8] The supposed higher clinical aggressiveness of BSCC compared with the conventional squamous cell carcinoma, remains a matter of debate. Banks et.al Luna et al and De Sampaio et al did not find significant differences in behavior between these two neoplasm in different anatomical sites, while others did. [8,9,10] The prognosis in BSCC depends on some variables of BSCC, Winzenburg et al. Reports suggest distant metastasis in 46% of cases where histology is purely basaloid and comedonecrosis with a bad prognosis. BSCCs known to metastasis in lymph nodes. Lymphovascular invasion is seen in 75% cases, and in 35-50% of the cases respectively. [9,11,12] As reflected since the first series lymph node status is a key factor in survival. Winzenburg et al showed significant differences in survival of BSCC with and without lymph node metastasis, with survival of 18.6 and 47.6 Months respectively. [12] Distant metastasis do occur in BSCCs with wide numbers ranging from 10% to around 50%. [1,12] Lung is the main target organ for distant metastasis in BSCCs. Finding of second primary tumor is a commonly recognized with esophagus. They are reported to be either synchronic or metachronic. [14] In our case we had the BSCCs which was present on left forearm, with palpable ipsilateral axillary lymph nodes. Patient was treated with wide excision with 2 cms. axillary lymph node dissection. margin and Histopathology revealed BSCCs with evidence of axillary Lymph nodes 2 out of 10 axillary nodes are positive for metastasis.

CONCLUSION

BSCC is a distinct clinicopathological entity with aggressive clinical behavior. The disease though occur anywhere in the body but it has a propensity for aerodigestive tract. The most reliable tool for diagnosis is Histopathology. Immunohistochemistry may be of help in the diagnosis. Common site for locoregional

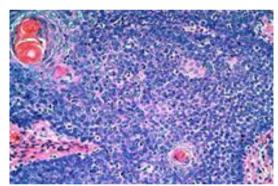
metastasis is regional Lymph nodes. Most commonly involved organ in distant metastasis is lung.



Ulcerated lesion over left front of forearm.



After excision of the growth. Axillary dissection.



Typical biphasic arrangement in a basaloid squamous cell carcinoma with squamous tumour nests centering basaloid areas.

REFERENCES

- 1. Wain SL. Kier R, Vollmer RT, Bossen EH. Basaloid squamous cell carcinoma of the tongue, hypopharynx and larynx: report of 10 cases. Hum Pathol, 1986; 17: 1158-66. [CrossRef] [Pubmed]
- 2. Kurman RJ, Toki T, Schiffman MH. Basaloid and warty carcinomas of the vulva: distinctive types of squamous cell carcinoma frequently associated with human papillomaviruses. Am J Surg Pathol, 1993; 17: 133-45. [CrossRef] [Pubmed]
- 3. Emmanuel P, Wang B, Wu M, Burstein DE. P63 immunohistochemistry in the distinction of adenoid cystic carcinoma from basaloid squamous cell carcinoma. Mod Pathol, 2005; 18: 645-50.

<u>www.ejpmr.com</u> 574

- [CrossRef] [Pubmed]
- 4. Koutis EV, Assimakopoulos DA, Doukas MG, Zinovieva I. A rare nasal tip skin metastasis of a basaloid squamous cell carcinoma of the larynx. Am J Med, 2008; 121: e3-4. [CrossRef] [Pubmed]
- Boyd AS, Rapini RP. Cutaneous collision tumors. An analysis of 69 cases and review of the literature. Am J Dermatopathol, 1994; 16: 253-57. [CrossRef] [Pubmed]
- 6. Borel DM. Cutaneous basosquamous carcinoma: review of the literature and report of 35 cases. Arch Pathol, 1973; 95: 293-97. [CrossRef] [Pubmed]
- 7. Montgomery H. Basal squamous cell epithelioma. Arch Dermatol Siphylol, 1928; 18: 50-73. [CrossRef] [Pubmed]
- 8. Banks ER, Frierson HF, Mills SE, George E, Zarbo RJ, Swanson PE. Basaloid squamous cell carcinoma of the head and neck: a clinicopathologic and immunohistochemical study of 40 cases. Am J Surg Pathol, 1992; 16: 939-46. [CrossRef] [Pubmed]
- Cardesa A; Zidar N, Ereño C. Basaloid squamous cell carcinoma. In: Barnes L, Eveson JW, Reichart P, Sidrasky D, editors. Pathology and genetics of head and neck tumours. Kleihues P, Sobón LH, series editors. World Health Organization classification of tumours. Lyon, France: IARC Press, 2005; 124–5.
- 10. Kleist B, Bankau A, Lorenz G, et al. Different risk factors in basaloid and common squamous head and neck cancer. Laryngoscope, 2004; 114: 1063–68. doi:10.1097/00005537-200406000-00020.[PubMed] [Cross Ref]
- 11. Luna MA, El Naggar A, Parichatikanond P, et al. Basaloid squamous carcinoma of the upper aeorodigestive tract. Clinicopathologic and DNA flow cytometric analysis. Cancer, 1990; 66: 537–42. doi: 10.1002/1097-0142(19900801)66:3<537::AID-CNCR2820660322>3.0.CO;2-J. [PubMed] [Cross Ref]
- 12. Winzenburg SM, Niehans GA, George E, et al. Basaloid squamous carcinoma: a clinical comparison of two histologic types with poorly differentiated squamous cell carcinoma. Otolaryngol Head Neck Surg, 1998; 119: 471–5. doi: 10.1016/S0194-5998(98)70104-4. [PubMed] [Cross Ref]
- 13. Bahar G, Feinmesser R, Popovtzer A, et al. Basaloid squamous carcinoma of the larynx. Am J Otolaryngol, 2003; 24: 204–8. doi: 10.1016/S0196-0709(03)00004-8. [PubMed] [Cross Ref]
- 14. Thompson LDR. Basaloid squamous cell carcinoma (BSCC) In: Thompson LDR, Golblum, editors. Head and neck pathology. Philadelphia: Churchill Livingstone, 2006; 70–3.

www.ejpmr.com 575