

Metatypical Carcinoma: A Rare Case Report

KALPANA KUMARI M.K., SRINIVAS C.H., KIRTHI KOUSHIK A.S.

ABSTRACT

Metatypical carcinoma is a carcinoma of the skin with intermediate features of basal cell carcinoma and squamous cell carcinoma. It is known for local recurrence and potential for distant metastatic

spread. Metatypical carcinoma is a histopathological diagnosis hence a more accurate assessment with a thorough knowledge will be a necessity. Here we report a rare case of metastatic metatypical carcinoma to bone which is extremely rare.

Key Words: Basal cell carcinoma, Metatypical carcinoma, Metastasis

INTRODUCTION

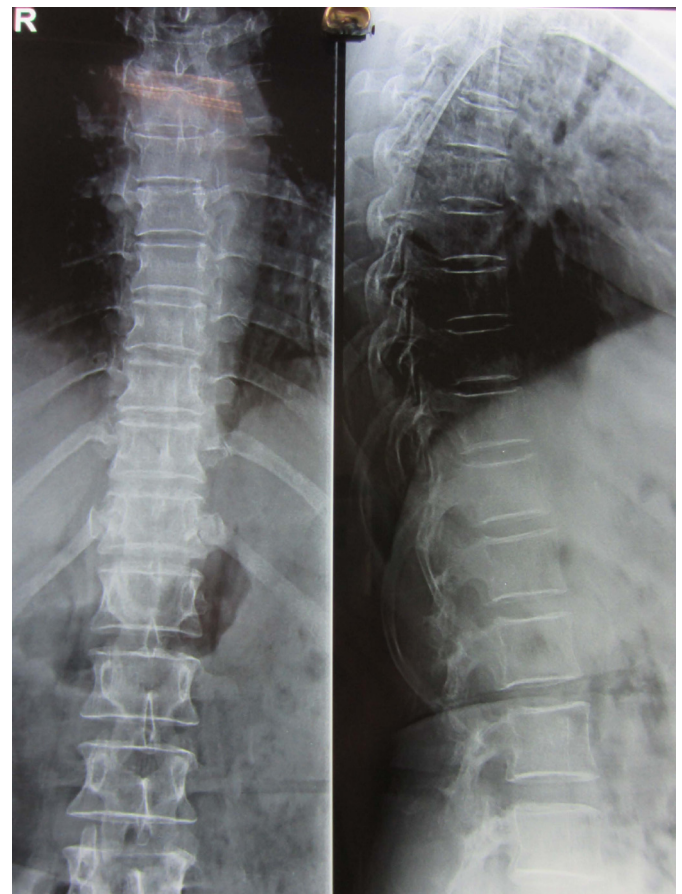
Skin cancers are the most common type of cancer, accounting for about half of all human cancers [1]. Non-melanoma skin cancers which include basal cell carcinoma and squamous cell carcinoma are the most frequent malignant conditions worldwide. Basal cell carcinomas are found predominantly on areas of skin exposed to sun [2]. Basosquamous carcinoma also known as metatypical carcinoma with features of both squamous and basal cell carcinoma has an incidence rate of 1-2% of all cancers of skin. This has to be considered as another entity with its own distinct features with rates of metastasis reported upto 7.4% [3].

CASE REPORT

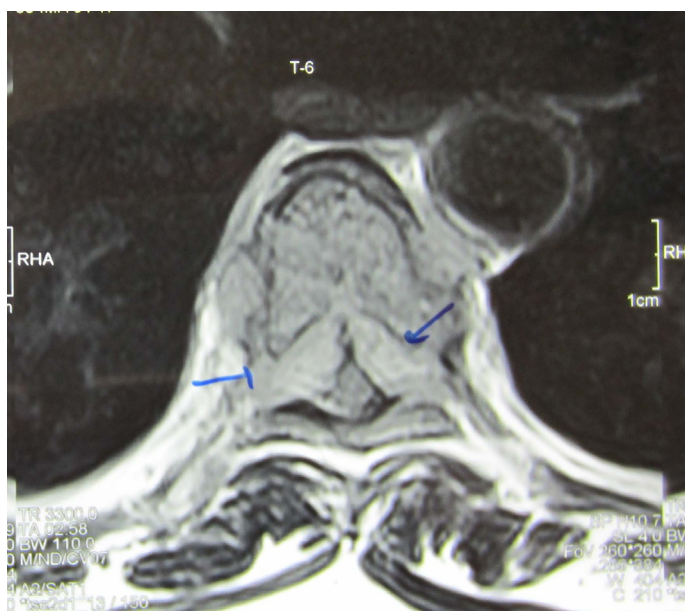
A 56-year-old female presented with complaints of nodule on right ala of nose from 3 weeks in November 2009 which was 1x1 cm in size. The lesion had a smooth surface, hard in consistency and not associated with pain or tenderness. There was no evidence of cervical lymphadenopathy. Patient underwent excision biopsy of the lesion on nose following which it resolved completely. Biopsy suggested of metatypical basal cell carcinoma. Patient was asymptomatic for 3 months following which she presented with a right cervical mass FNAC of which showed metastatic deposits. Patient underwent right side Type II comprehensive neck dissection. Histopathology report showed level I & II – 5 nodes free of tumor, level III - 36 nodes free of tumor, level IV and V – 1 out of 8 lymph nodes showed metastatic carcinoma with perinodal spread. Adjuvant RT was given with 60 Gy in 30 fractions to neck and 40 Gy in 15 fractions to nasal vestibule using IMRT.

Patient was asymptomatic till January 2010 then she presented to our institute with complaints of backache and difficulty in walking. On examination, tenderness was elicited on D6 spinous process with increased tone and brisk reflexes in the lower limbs. Also a nodular, non-tender swelling was noted in the occipital region of the skull. X-ray showed evidence of a lytic lesion in the occipital region, dorsolumbar spine showed osteoporotic changes in the vertebral body, appendages and disc appear normal, the right femur showed a small lytic lesion and Chest X-ray was normal. MRI of spine showed D6 vertebral lesion suggestive of metastasis, T5 to T7 showed extra-dural lesion with moderate cord compression. Bone scan showed metastasis in right posterior

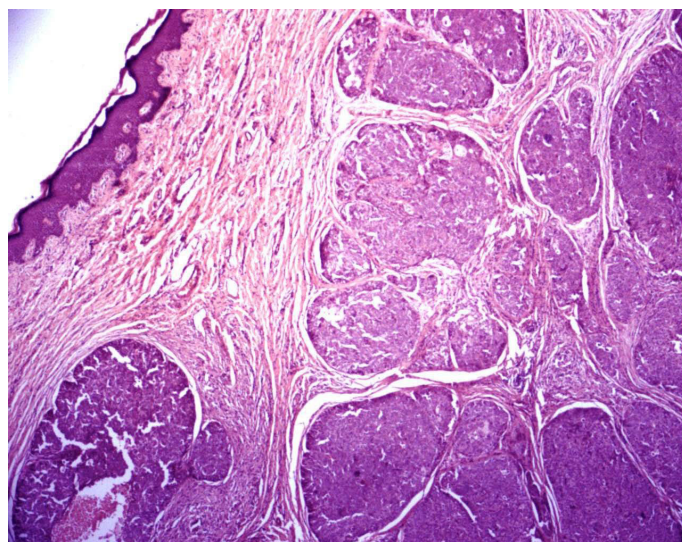
parieto-occipital bone, D6 vertebra and midshaft of right femur. USG abdomen and pelvis was essentially normal. Patient underwent D6 Laminectomy. Post-operatively wounds healed satisfactorily. Histopathological examination showed highly undifferentiated metastatic carcinoma. Second review of the histopathology slides was done which suggested metatypical carcinoma. Palliative Radiotherapy to occipital region, right mid shaft of femur and D6 vertebra was given. At 6 months post-surgery, swelling over the skull regressed in size, power in the lower limbs is intact with persisting spasticity. Patient is able to walk with support. Femoral lesion is ossified.



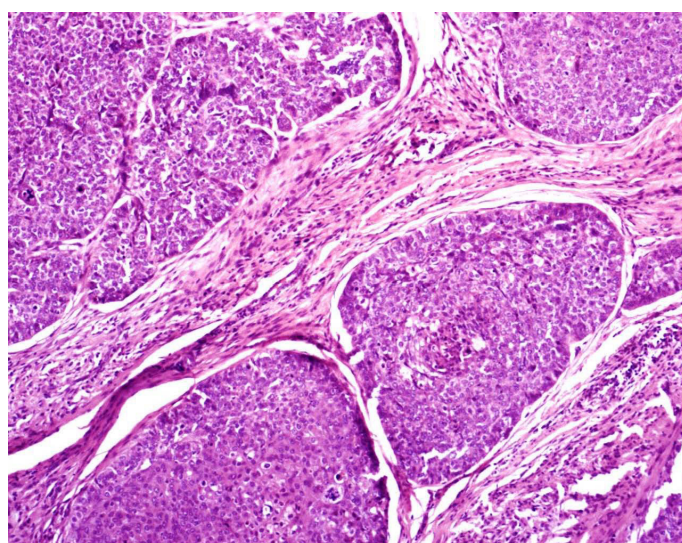
[Table/Fig-1]: X-ray of thoracolumbar spine showing lytic lesion in D6 vertebra



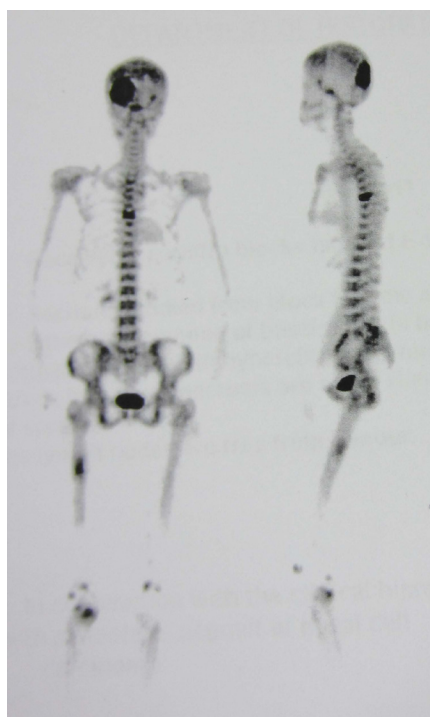
[Table/Fig-2]: MRI of T6 vertebra showing a lesion in the body compressing the spinal cord



[Table/Fig-5]: Microphotograph showing tumour islands with peripheral palisading of tumour cells (10x)



[Table/Fig-6]: High power (45x) view showing features of both basal cell carcinoma and squamous differentiation centrally



[Table/Fig-3]: Bone scan showing increase uptake in skull, T6 vertebra and right femoral shaft



[Table/Fig-4]: X-ray of right femur lateral view showing lytic lesion in midshaft femur

DISCUSSION

Non-melanoma skin cancers are the most common cancer in US, UK and Australia [1]. There is an increase in incidence of skin cancers which can be attributed to increased detection and awareness [2]. The incidence of non-melanoma skin cancers varies based on geographic location with highest rates of 1-2% per year in places like Australia [3].

Basosquamous carcinoma is a lesion that is continuum of basal cell carcinoma and squamous cell carcinoma. Basal cell carcinoma undergoes squamous cell differentiation and that alters its biologic behavior. These intermediate lesions have a greater tendency to recur and metastasize [4]. However some authors say the mode of metastatic spread and characteristics of the histology make it

rather unlikely that metastasis of the basal cell carcinoma is due to a change toward squamous cell carcinoma [5].

We report here a case of metatypical carcinoma with metastasis to the bone. The incidence of metastatic basal cell carcinoma is only 0.0028-0.5% [2]. In the review of 170 case, von Domarus [5] found that the median age of onset was 45-years, the median interval between the diagnosis and metastatic lesion was 9 years. For our patient the age of onset was 56-years and it metastasized within 3 months. Generally it metastasizes to lymph nodes and lung and less commonly to bone and internal organs [6]. Men are more predisposed to metastatic basal cell carcinoma than women by a ratio of 2:1 [2, 7]. Our case was a female. An Indian series has reported an unusual female preponderance [7]. Metastatic basal cell carcinoma was first reported in 1894 in a 46 year old man with metastases to submaxillary lymph node. Since then there have been only about 300 cases of metastatic basal cell carcinoma reported in scientific literature over the last 110 years [8].

The criteria for the diagnosis of metastatic basal cell carcinoma were first defined by Lattes and Kessler [9] in 1985:

1. The primary tumour must originate from the skin and not the mucosa.

2. Metastasis cannot be by simple extension but must occur at a site distant from primary tumour.
3. The primary and the metastatic tumor must have similar histologic subtypes.

Blewitt reviewed 38 cases of metastatic basal cell carcinoma and noted that the primary tumour was usually located on face or scalp [10]. In our case it was located on right ala of nose. It has been postulated that the presence of embryogenic fusion planes in the midface area results in more occult and distant spread, as well as more difficult for surgical removal [11].

On the other hand, the existence of basosquamous is questioned by many. It would seem that the entirely different genesis of squamous cell carcinoma, a tumour composed of immature rather than anaplastic cells, makes the occurrence of transitional forms quite unlikely. It can be assumed that the so called mixed type of basosquamous carcinoma represent a keratotic basal cell carcinoma and the intermediate type represents a basal cell carcinoma with differentiation into two types [12].

The rarity of cases of metastatic basal cell carcinoma has limited the availability of various treatment strategies. The three modalities that have been used are surgery, radiotherapy and chemotherapy [8]. The prognosis of metatypical carcinoma is generally poor.

CONCLUSION

Metatypical basal cell carcinoma are uncommon and metastasis to the bone is extremely rare, however as these are more

aggressive, close and long term follow up for distant metastasis is suggested.

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