Case Report

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Pigmented Basal Cell Carcinoma in Marjolin's Ulcer

Surgery Section

HEMANTH SURESHWARA GHALIGE[1], KARTHIK K[2], SANJEEV SOMASHEKAR RATHOD[3], NGANGBAM BOJEN[4], S RANITA DEVI[5]

ABSTRACT

Marjolin's ulcer is a carcinoma that develops in chronic benign ulcers or scars. It was first found to be associated with chronic osteomyelitis. Squamous cell carcinoma is the most common cancer which is being noted in Marjolin's ulcer. Suspicion of such lesions should be raised in chronic wounds which demonstrate characteristic changes. Diagnosis is made by doing a biopsy and it is treated by wide local excision. We are reporting here a case of 65–year–old female who presented with a growth in a long standing scar over her back. Scar was caused by an incision and drainage for an abscess performed 30 years back. On biopsy, features of pigmented variety of Basal Cell Carcinoma (BCC) were seen. Though occurrence of basal cell carcinoma in Marjolin's ulcer is known, pigmented variety is yet to be reported. The rare varieties like pigmented type of basal cell carcinoma in Marjolin's ulcer, must be borne in mind by histopathologists.

Keywords: Marjolin's ulcer, Basal cell carcinoma, Pigmented BCC, Squamous cell carcinoma

CASE REPORT

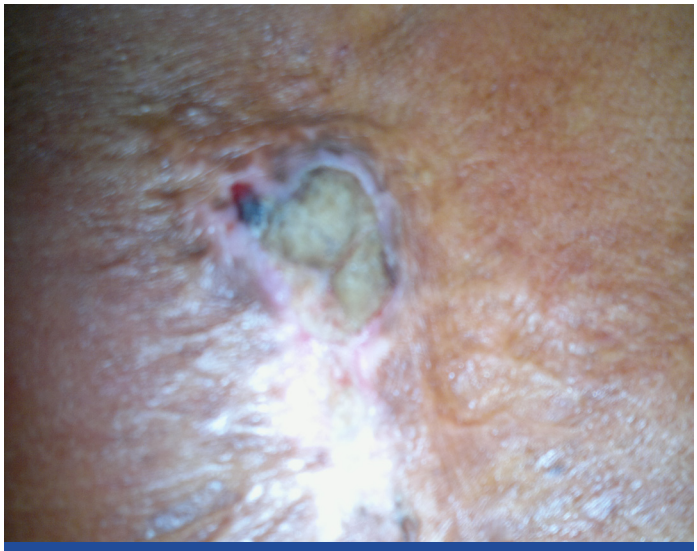
A 65-year-old female, a housewife, presented with a swelling in an old scar, which was seen since 2 months. The swelling was insidious on onset, gradually progressive, not associated with pain or itching, with no similar swellings being seen elsewhere. There was a history of incision and drainage for the abscess, which she had developed around 30 years back, which had healed by secondary intention.

On inspection, a solitary swelling of size, 1cmx1cm was seen in upper end of the scar, which measured 5cm × 2cm, with irregular borders, which was present in the left upper back, near angle of scapula. It was greyish yellow in colour, with blackish spots and rest of scar was white in colour. The swelling had an irregular surface. On palpation, inspectory findings were confirmed, swelling was hard in consistency, freely mobile and surrounding skin didn't have any induration [Table/Fig-1 and 2]. Systemic examination did not reveal lymphadenopathy or cachexia or any other abnormality.

A complete haemogram and coagulation profile were within normal ranges and edge biopsy was done as primary modality of investigation. Multiple full thickness incisional biopsies were taken and they were subjected to Histopathological Examination (HPE). HPE showed a focally ulcerated epithelium within underlying malignant tumour, which was composed of cells arranged in nests and embedded in fibro-collagenous stroma. Tumour nests were separated from surrounding stroma by clear space clefts. The nests were composed of round to oval tumour cells which had hyperchromatic nuclei, prominent nucleoli, increased mitotic figures and acidophilic cytoplasm. There was peripheral palisading of tumour cells. There was a marked presence of pigment laiden tumour cells and macrophages [Table/Fig-3 and 4]. All features were consistent with a diagnosis of pigmented basal cell carcinoma.

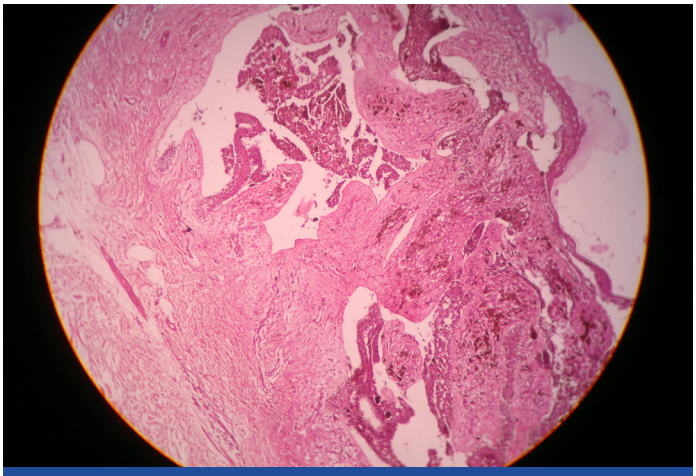
As the tumour was well differentiated and as there was no evidence of metastasis, a wide local excision with a tumour free margin of 1cm was undertaken under local anaesthesia. Resected specimen was subjected to HPE, which confirmed tumour free margin. As per patient's choice, wound was allowed to heal secondarily.

Post–operative period was uneventful and wound healed completely in 3 weeks. She was followed up regularly on days 3, 7, 21 and then at 3 months and 6 months. There was no recurrence.

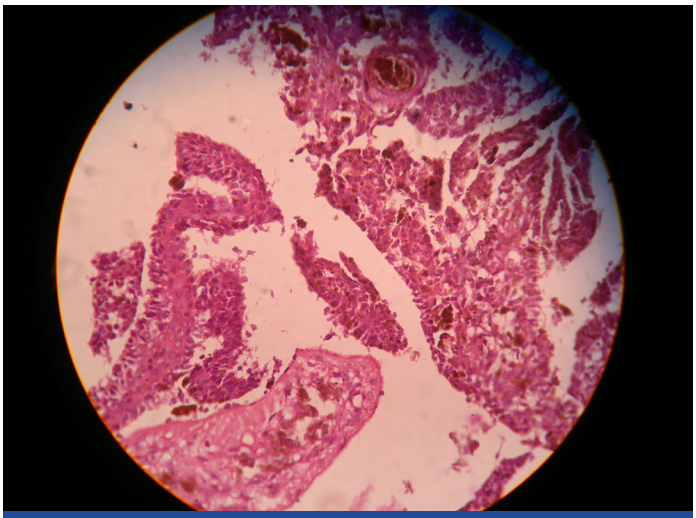


[Table/Fig-1]: Clinical photograph one

[Table/Fig-2]: Clinical photograph two



[Table/Fig-3]: Histological appearence Low power 100x



[Table/Fig-4]: Histological appearence high power 400x

DISCUSSION

Marjolin's ulcer, though rare, should always be kept in mind by all the physicians. The alarming features of swelling, pain, itching, ulcers in scars should be well documented and they should be thoroughly worked up, especially in a country like ours, where the follow up is difficult, due to illiteracy and financial constraints.

Two forms have been described, namely, acute and chronic forms. 36 years of latency is documented in chronic form [1]. In our case, latency period was noted to be 30 years after incision and drainage of abscess on the back.

Confirmation of malignancy is performed by biopsy. Biopsies of multiple sites and depths should be taken. Failure in taking biopsies from multiple sites and depths can lead to false-negative biopsy results and this can again cause a delay in diagnosis [2]. The most common histological type in Marjolin's ulcer is squamous cell carcinoma, others being basal cell carcinoma, melanoma and sarcomas of bone, fibrous tissue or fat origin [3]. In our case, the histology revealed basal cell carcinoma.

The morphological varieties of basal cell carcinoma, which have been described, are nodular, cystic, nodulocystic, pigmented and nevoid types. The nodular variety (90%) is the most common form [4]. In our case, relatively uncommon pigmented type was noted.

Treatment modalities include wide local excision, block dissection of regional nodes, amputation in advanced lesions of limbs, radiotherapy and chemotherapy [3]. The mainstay of treatment is wide local excision with a 2 cm margin [3]. In our case, we performed wide local excision with a 1 cm margin, which was negative for tumour cells. Malheiro et al., [5] opines that the defect can be closed by a primary or a primarily delayed skin graft. In our case, defect was left open to heal secondarily.

CONCLUSION

Marjolin's ulcer should be suspected in a non-healing ulcer on a scar tissue with a usual latency period of around 30 years. An early diagnosis can be made possible by giving patient education and through frequent follow ups. The histopathologist has a very important role in the management of Marjolin's ulcer. The rare varieties like that of pigmented type of basal cell carcinoma in Marjolin's ulcer must be borne in mind.

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PARTICULARS OF CONTRIBUTORS:
1. Junior Resident, Department of General Surgery, Regional Institute of Medical Sciences, Imphal, Manipur, India.
2. Junior Resident, Department of General Surgery, Regional Institute of Medical Sciences, Imphal, Manipur, India.
3. Junior Resident, Department of General Surgery, Regional Institute of Medical Sciences, Imphal, Manipur, India.
4. Junior Resident, Department of General Surgery, Regional Institute of Medical Sciences, Imphal, Manipur, India.
5. Associate Professor, Department of General Surgery, Regional Institute of Medical Sciences, Imphal, Manipur, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Karthik K., Room no 16, PG Gents Hostel no 2, RIMS, Imphal, Manipur-795004, India.
Phone: 91-9402845260, E-mail: karthik_bmc@yahoo.co.in

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