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Case Report

Well differentiated squamous cell carcinoma mimicking occipital lipoma

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ABSTRACT

Squamous cell carcinoma is the second most common cancer arising from keratinocytes which can present as benign lesions. We present a case of well differentiated carcinoma mimicking an occipital lipoma. A 39-year-old female presented with occipital swelling of 8 years duration with associated pain which on examination showed a firm, well-defined lobulated, mildly tender mass attached to the skin but not underlying structures. Ultrasound showed lipoma with degenerative changes and histology showed well differentiated squamous cell carcinoma. She subsequently had wide local excision. Our case is similar to other reports showing squamous cell carcinoma resembling benign conditions. There is therefore a need to have a high index of suspicion when evaluating benign lesions especially of the scalp.

Keywords: Squamous, Cell, Carcinoma, Scalp, Lipoma

INTRODUCTION

Squamous cell carcinoma (SCC) is the second most common malignancy arising from keratinocytes of the epidermis.[1,2] It can range from well to poorly differentiated, invasive or in-situ, local to the aggressive type with lympho-vascular or perineural invasion.[1] However, it is rare to see cystic structures.[2] There have been reports of well differentiated SCC presenting as a lipoma and poorly differentiated SCC presenting as sebaceous cyst of the scalp.[3,4] We present a case of well differentiated SCC presenting as a lipoma of the occiput.

CASE REPORT

39-year-old female presented on 1/5/2023 with swelling on the occipital region of 8 years duration. It was of gradual onset, slow growing reached the present size of a small lemon, with recent onset of occasional mild pain aggravated by pressure. She had a history of trauma at the site, about 6 months prior to the swelling, which healed secondarily with a scar. No history of irradiation or ulceration, no weight loss or anorexia. She presented to the surgical out-patient as it was causing her psychological discomfort and pain while making her hair. Examination revealed a 4×4×2 cm hemispherical lump on her occiput, with an overlying scar, firm, mildly tender on deep palpation, attached to the skin but not to underlying tissues, lobulated, slipping sign equivocal and no cervical lymphadenopathy (Figure 1).

Soft tissue scan done showed lipoma with degenerative changes. Skull X-ray done showed no bony involvement. Her full blood count and renal function tests were normal. She had an excision biopsy in which a well encapsulated mass with a hyperpigmented component was excised (Figure 2) and the surgical site healed well (Figure 3). Gross pathology showed grayish brown appearance with focal yellowish areas. Histology showed malignant epithelial neoplasm disposed in sheets and nests pattern and the cells had round to oval hyperchromatic nuclei with occasional prominent nucleoli and abundant

eosinophilic cytoplasm. There were foci of necrosis, intercellular bridges, dyskeratosis and keratin pearls. A diagnosis of well differentiated squamous cell carcinoma was made and this was corroborated by another independent pathologist (Figures 4 and 5). She had subsequent wide local excision (Figure 6) and then scalp rotation flap cover at a subsequent stage after confirming negative resection margins (Figure 7). At one-year follow-up, there was no tumour recurrence and she was satisfied with the scar with a good quality of life.

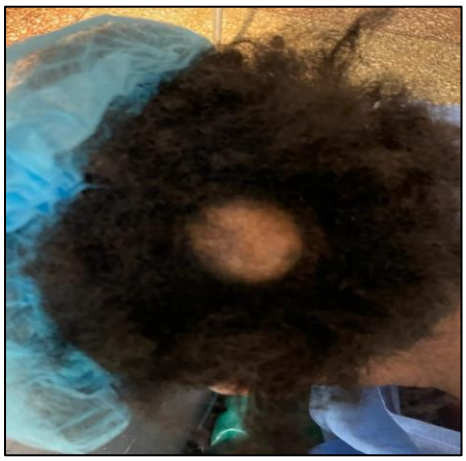


Figure 1: Before excision.

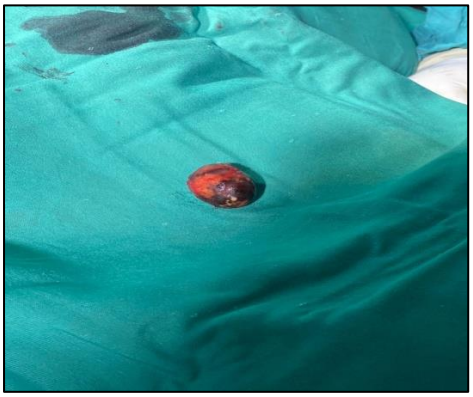


Figure 2: Specimen removed.

Figure 3: Post-operative picture.

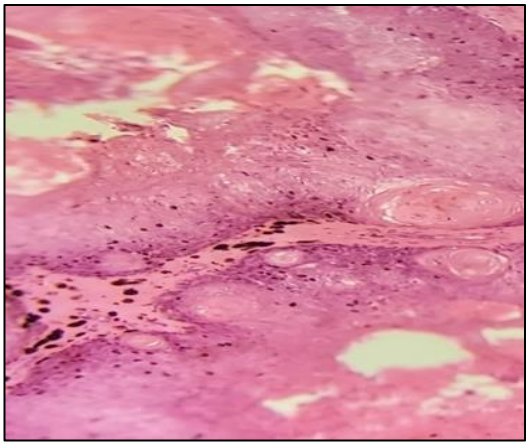
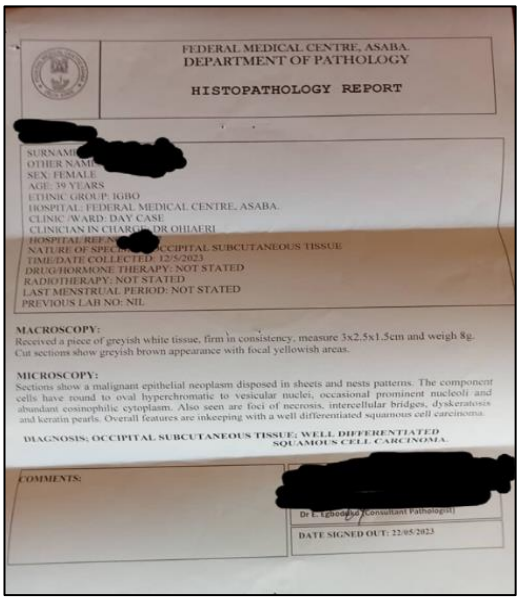


Figure 4: Histology slide showing keratin pearls (black arrow).



FEDERAL MEDICAL CENTRE, ASABA.
DEPARTMENT OF PATHOLOGY

HISTOPATHOLOGY REPORT

[redacted]
SEX: FEMALE
AGE: 39 YEARS
ETHNIC GROUP: IGBO
HOSPITAL: FEDERAL MEDICAL CENTRE, ASABA.
CLINIC /WARD: DAY CASE
CLINICIAN IN CHARGE: DR OHIAERI
HOSPITAL REF NO: [redacted]
NATURE OF SPECIMEN: OCCIPITAL SUBCUTANEOUS TISSUE
TIME/DATE COLLECTED: 12/5/2023
DRUG/HORMONE THERAPY: NOT STATED
RADIOTHERAPY: NOT STATED
LAST MENSTRUAL PERIOD: NOT STATED
PREVIOUS LAB NO: NIL

MACROSCOPY:
Received a piece of greyish white tissue, firm in consistency, measure 3x2.5x1.5cm and weigh 8g. Cut sections show greyish brown appearance with focal yellowish areas.

MICROSCOPY:
Sections show a malignant epithelial neoplasm disposed in sheets and nests patterns. The component cells have round to oval hyperchromatic to vesicular nuclei, occasional prominent nucleoli and abundant eosinophilic cytoplasm. Also seen are foci of necrosis, intercellular bridges, dyskeratosis and keratin pearls. Overall features are inkeeping with a well differentiated squamous cell carcinoma.

DIAGNOSIS: OCCIPITAL SUBCUTANEOUS TISSUE: WELL DIFFERENTIATED SQUAMOUS CELL CARCINOMA.

COMMENTS:

[redacted]
Dr E. Egbodaga (Consultant Pathologist)
DATE SIGNED OUT: 22/05/2023

Figure 5: Histology report.

Figure 6: Wide local excision (intra-operative picture).

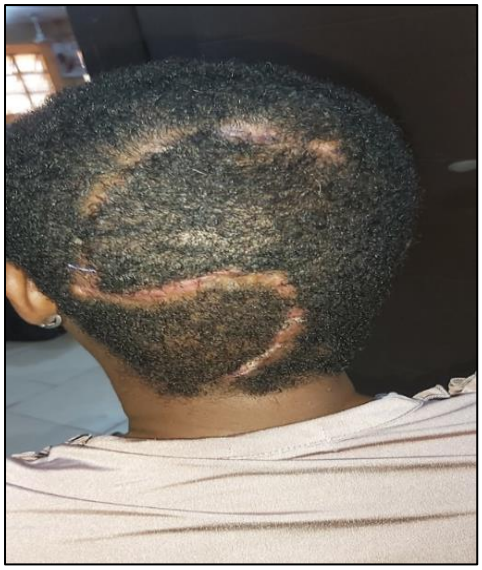


Figure 7: Post scalp rotation flap.

DISCUSSION

Squamous cell carcinoma (SCC) can be well differentiated or poorly differentiated.[1,2] Well differentiated SCC can present as erythematous patches, nodules and well-defined ulcerative lesions.[3] They have low recurrence and metastasis rates.[5] Gallego and Puig reported a case of a 45-year-old male with well differentiated SCC presenting as a lipoma of the scalp which is similar to our case. Squamous cell carcinoma may also mimic other benign lesions as seen in a case of a cystic poorly differentiated SCC of the scalp resembling a sebaceous cyst; and can even have benign cyst-like structures as demonstrated by Asad et al. Several malignancies have been reported to originate from epidermal inclusion cysts, the most common being well differentiated SCC of the head and neck region.[1] Therefore, a high index of suspicion is necessary when managing benign-appearing lesions, more-so on the scalp.

Cutaneous squamous cell carcinoma affects Caucasians more with an average age of onset of the 6th decade and has a predilection for males.[6,7] This is in contrast to our subject who is a black female in her 4th decade of life. The scalp is one of the major sites that presents with high-risk cutaneous squamous cell carcinoma, and accounts for 3-20% of all cutaneous squamous cell carcinoma.[7-9] There is little evidence concerning routine imaging in cutaneous SCC and since the risk of lymph node metastasis is low, may result in significant number of false positives and unwarranted additional procedures.[10] This was not the case however with our subject as the ultrasound showed more of a benign lipoma. When patients require surgery, like our patient, wide local excision is the gold-standard which improves prognosis.[7,11] The options for soft tissue cover ranges from direct closure, split and full thickness skin grafts, local flaps, tissue expansion, dermal substitutes to free flaps.[8] Skin grafts do not provide hair-bearing scalp and lead to unaesthetic scars which are better suited for elderly patients that are not bothered with cosmesis.[8] Local flaps are best suited for young patients especially females, hence the choice of a local flap in our patient who was concerned about the aesthesis of her hair.[8]

CONCLUSION

We have presented a case of a well differentiated SCC resembling an occipital lipoma. There is a need to have a high index of suspicion when evaluating benign lipoma or cyst-like lesions and send such for histological examination to rule out malignancy.

ACKNOWLEDGEMENTS

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Ethical approval: Not required

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