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CASE REPORT

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Dermatology Photo Quiz - 4

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Abstract

Basal Cell Carcinoma (BCC) is slow growing and less discomforting lesion. BCC is usually seen on upper part of the face (A line drawn from the angle of mouth to tragus of the ear). As the lesion is less symptomatic, patients do not come forward for treatment. Pain and itching are the greatest gift of the God. People seek treatment, if they get discomfort in the lesion either in the form of pain or itching. This patient is 75-year-old man, illiterate and do not give importance to his external appearance, all the time he will be thinking of going to field, grow the crops, and feed himself and his dependents. As he fell down and injured the lesion, he was forced to come major hospital for treatment. The reason for not giving importance to his external appearance is because of his poverty and illiteracy which makes him work tirelessly for his and his family to meet his daily needs.

Keywords: BCC; Tumor cells; Basal cells

Patient history & clinical examination



75 year old male patient came with h/o a skin lesion over forehead, just above the left eye brow since 12

Slowly growing and asymptomatic lesion is seen. Although his family members and friends told him about this lesion, he neglected, as it is not causing any pain and discomfort.

15 days back, he fell down on a stone, injured the lesion, since then he is taking medical treatment. Village doctors referred him to R L Jalappa Hospital for treatment.

What is your diagnosis?

A 75-year-old male came to R. L. Jalappa Hospital & Research Centre, Tamaka, Kolar on 05.06.2023, for dimness of vision. Routine examination showed a well circumscribed plaque of size 2.5 X 2.0 cm present on forehead above the left eyebrow. The borders are raised, rolled inwards, indurated and waxy. Surface is covered with thick, dry, adherent crust. In the lower half of the lesion, crust has fallen, exposing raw dull red granulation tissue. In the lower margin near eyebrow, crust has shrunk creating a crater. The entire lesion moves over the underlying structure. The lesion is not tender. Regional lymph nodes are not enlarged.

All routine investigations done are within normal limits. Punch biopsy done from the margin. Biopsy report show nests of basal cells arranged in palisading arrangement. Basal cells are having hyperchromatic nuclei and scant cytoplasm. Features are suggestive of "Basal Cell Carcinoma".

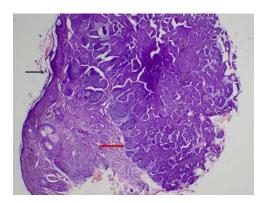


Fig 1. Section studied from skin shows well circumscribedtumor arising from epidermis (Black arrow). Tumor cells are arranged in nests (Red arrow). H&E Stain. 10 x magnifications Courtesy: Department of Pathology, SDUMC, Kolar

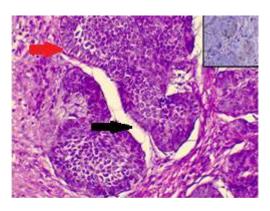


Fig 2. Tumor cells are basal cell type, having hyperchromatic nuclei and scant amount of cytoplasm. Peripheral palisading of cells (Red arrow) and retraction artefact noted (Black arrow). Inset shows pigment in the tumor cells. H&E Stain. 40 x magnifications. Courtesy: Department of Pathology, SDUMC, Kolar

Basal cell carcinoma

Skin tumors are commonly encountered in dermatology OPD. Most of the skin tumors are asymptomatic; either they are noticed by doctors or patient's friends. Cosmetically conscious people notice them and take treatment at an early stage. Skin tumors can be grouped into five types. They are 1) Tumors arising from keratinocytes, 2) Tumors arising from melanocytes, 3) Tumors arising from soft tissue (vascular tumors and smooth muscle tumors), 4) Tumors arising from nerves, and 5) Tumors arising from subcutaneous tissue ^{1,2}.

Tumors arising from keratinocytes can be further grouped into five types. They are 1) Benign acanthomas (benign tumors of epidermal keratinocytes), 2) Premalignant lesions of sun-damaged skin called Actinic Keratosis (Solar Keratosis), 3) Premalignant skin lesions called Bowens disease, and 4) Malignant tumors like Basal Cell Carcinoma and Squamous Cell Carcinoma ^{1,2}.

BCC should be excised surgically with 4 mm border. Other modalities of treatment are 1) Electro surgery, 2) Cryotherapy, 3) Mohs micrographic surgery, 4) Radiotherapy, 5) Medical treatment (topical and intralesional 5-FU, immiquimod), 6) Photodynamic therapy and 7) LASERs ^{1–3}.

Discussion

BCC occurs in elderly population⁴. It is slow growing and locally invasive tumor rarely metastasizes to distant organs. Farmers working in rural areas who are constantly exposed to sunlight develop chronic sunburn. BCC develop in chronic sun exposed regions⁵. BCC arises from pluripotent stem cells present in bulge region of hair follicles and basal cell layer of epidermis. Sunrays contain both UVB and UVA rays, which are carcinogenic, artificial tanning devices, Ionization radiation, Arsenic exposure, and Immunosuppuration, are associ-

ated with increased incidence of BCC. There is an increased incidence of BCC in skin conditions like Xeroderma pigmentosum; Albinism, Grolin syndrome and Bazex syndrome ^{1,2}.

BCC occurs over the head, face, neck and upper back. Commonest morphological clinical type is nodular OR noduloulcerative condition called "rodent ulcer" (60-80%). Other clinical forms are 1) Micro nodular, 2) Pigmented BCC, 3) Superficial BCC, 4) Morphea like lesion, and 5) Fibroepithelioma of Pinkus. As the BCC arises from pluripotent stem cells, clinical variants are seen. All the variants have common microscopic findings⁶. They are 1) Nests of basaloid tumor cells with hyper chromatic nucleus and scant cytoplasm 2) one row of basaloid cells will be guarding each and every nest of basaloid cells called palisading arrangement ^{1,2}.

Conclusion

Our patient, a responsible 75-year-old farmer has to take care of his family and is staying in a small rural village. Every day he has to go to fields to earn his livelihood and also to feed his dependents. His relatives and his friends have repeatedly told to get medical treatment for the ugly lesion on the forehead. He never gave importance to his looks, all the time he bothered about how to feed his dependents tomorrow. The lesion is 2 X 2.5 cm on forehead; still he

did not take any treatment. As the lesion is asymptomatic, and not metastasized to regional lymph nodes, complications have not developed. Patient has been counseled and referred to surgical oncology for further management. We conclude that the awareness about slow growing asymptomatic lesions should be increased among the public.

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