

Case Report

Management of facial basal cell carcinoma in rural hospital: a case report

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ABSTRACT

Basal cell carcinoma is usually a slow-growing tumor for which metastases are rare. Basal Cell Carcinoma is the most common type of skin cancer around 75-80%. We present the case of A 87-year-old woman presented with a chief complaint of a reddish-brown nodule on the right side of her face. The complaint has been about 4 months, initially small in size as a mole but grew progressively to its current size. It is known that his daily work is as a farmer. However, one of the main problems of BCC is the cosmetic appearance, especially in the facial area.

Keywords: Skin cancer, Basal cell carcinoma, Surgical excision

INTRODUCTION

Basal cell carcinoma is usually a slow-growing tumor for which metastases are rare. Although rarely fatal, BCC can be highly destructive and disfigure local tissues when treatment is inadequate or delayed. BCC is the most common skin cancer in humans, with increasing incidence rates worldwide. Men generally have higher rates of BCC than women. BCC is more frequent in geographic locations with greater UV exposure, such as those at higher or lower latitudes.¹

Basal Cell Carcinoma is the most common type of skin cancer around 75-80%, the ratio of BCC between men and women is 2:1, and incidence increases with age more than 100-fold in persons aged 55 to 70 years than in those aged 20 years or younger. Seventy to eighty percent of BCC occurs in the head and neck region, followed by the trunk (about 25%), and penis, vulva, or perianal skin (about 5%). However, there has been an increase in the incidence of

BCC in younger populations especially women due to frequent exposure to UV rays from the sun.^{2,3}

Current management for BCC includes surgical excision, electrodesiccation and curettage (EDC), cryosurgery, mohs micrographic surgery, topical imiquimod, topical fluorouracil, photodynamic therapy, radiation therapy, intralesional treatments, SMO inhibitors, cytotoxic chemotherapy, and treatment of locally advanced and metastatic BCC.⁴ We report a case management of facial BCC in a rural hospital.

CASE REPORT

A 87-year-old woman presented with a chief complaint of a reddish-brown nodule on the right side of her face. The complaint has been about 4 months, initially small in size as a mole but grew progressively to its current size. It is known that his daily work is as a farmer.

The patient has no previous history of chemotherapy or radiotherapy, there are no similar nodules in other areas of the body. no complaints of vision, no history of previous surgery, no history of the same complaints in the family, the patient only complained of a weight loss of 6 kg in the last few months.



Figure 1: Local examination of BCC on facial.



Figure 2: After surgery.



Figure 3: 10 days after surgery.

The patient's vital signs showed blood pressure 120/75 mmHg, pulse 88 beats per minute, breath 20 beats per minute, and temperature 36.5 °C. No abnormalities were found on examination of the thorax, abdomen, and extremities. Physical local examination showed a nodule on the right side of face size of 4 x 4 cm, reddish brown

nodules, pus discharge in the middle, shiny, and itchy. After explaining the disease to the patient and family, the patient agreed to perform excisional surgery.

After surgery, samples were sent for examination at the anatomical pathology laboratory. If the result shows it lead to BCC, the patient will be referred to an oncological surgeon for adjuvant therapy.

DISCUSSION

The diagnosis of BCC in this patient was based on regarding history taking, physical examination, and histopathological anatomy examination. The patient an 87-year-old woman, according to the literature BCC patient is often found in people over 55 years of age. Physical local examination showed a nodule on the right side of face size of 4 x 4 cm, reddish brown nodules, pus discharge in the middle, shiny, and itchy.

BCC most commonly presents as a slow-growing, skin-colored nodule with a pearly shiny appearance and arborizing vessels visible on the tumour surface upon clinical or dermatoscopic inspection, with larger tumours showing central ulceration.⁵ It is divided into several subtypes including nodular, superficial, morpheaform, infiltrative, fibroepithelial, and pigmented types.⁶

The patient is a farmer who is exposed to sunlight daily. This is closely related to the etiology of BCC, namely sun exposure, genetic factors, and the environment. The aetiological factor for BCC development is exposure to ultraviolet radiation (UVR) which, particularly in lighter Fitzpatrick skin types, leads to the accumulation of DNA damage. UVR has roles in the generation of an immunosuppressive environment, facilitating cancer progression. In addition, environmental carcinogens that can trigger BCC include ionising radiation and arsenic. Genetic profiling of patients with BCC, who developed multiple BCCs from a young age, identified mutations in the PTCH1 gene. Which encodes a transmembrane receptors involved in the Hedgehog signaling pathway. Studies of sporadic BCC have mapped driver mutations to PTCH1 and other components of the Hedgehog pathway including SMO and GLI.⁷

The rural patients regard initial lesions of BCC as a minor cosmetic problem with insignificant impact on health and seek medical advice only when lesions become symptomatic or disfiguring. So, late presentation to health facilities is equally contributory. Exposure to pesticides may also add to the risk of skin cancers, but further clinical and research studies are needed to confirm their role in the pathogenesis of BCC and to delineate underlying mechanisms. Occupations at risk of BCC that are highlighted in our study include agricultural workers.⁸

Surgical excision is an effective treatment for BCC cases, generally removed with an excision margin of about 3-4 mm of normal skin. Especially in the face, grafts and flaps

may still be required to close the wound, rather than closing the wound directly.⁹

Patients with a history of BCC should be educated on the importance of sun protection, sun avoidance, and avoidance of tanning booths. Routine sunscreen use is recommended in combination with improved sun protection behaviours such as seeking shade and wearing a wide-brimmed head covering.¹⁰

CONCLUSION

However, one of the main problems of BCC is the cosmetic appearance, especially in the facial area. Comprehensive management such as surgical excision is still an effective treatment to produce a better and satisfactory appearance.

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