Basal Cell Carcinoma Treated by Excision and Skin Flap with Histopathology Result Still Have Tumour Cell on the Bottom

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ABSTRACT

Basal cell carcinoma is a malignancy originated from basal layer of the epidermis which invade and destroy substantial tissue locally and is the most common cancer in human. BCC occurs mostly in sun exposed areas ultraviolet light has shown a major role in the pathogeneses of BCC. 83 years old lady, brought for unhealed wound on her left cheek. It started like a blackish mole around 2 years ago, it then growing into surrounding areas and bleeds easily. First, we started with conservative treatment, after around two weeks surgeon decides to do surgical excision of the lesion. Although histopathological results shown bottom sites still have tumour cell, but after the surgery, patient’s wound shown to improve. Mohs Micrographic Surgery is the gold standard procedure for skin cancer, followed by standard wide excision of lesion. In this case wide excision and skin flap under local anaesthesia with lidocaine plus epinephrine had been chosen, regarding her general condition which causing an intolerably to undergo general anaesthesia. Although bottom sites still have tumour cell. After the surgery, patient’s wound shown to improve. Recurrence is quite common in BCC case, which is why routine check-up is advisable.

Keywords: Basal cell carcinoma, local anaesthesia, wide excision.

I. INTRODUCTION

Basal cell carcinoma is a malignancy originated from basal layer of the epidermis which invade and destroy substantial tissue locally. BCC is the most common cancer in human, particularly white, fair skin populations. It occurs mostly in sun exposed areas, mostly face areas. Ultraviolet light has shown a major role in the pathogeneses of BCC, which induces mutation in tumour suppressors genes [1]-[3]. In general, BCC is slow growing tumour and progressing to invade subcutaneous layer, muscle and even bone. However, metastases have been reported extremely rare. Spread is equally distributed between haematogenous and lymphatic. It is believed supporting stroma has played a crucial role for the tumour cell to survive [2], [4].

The aim of the treatment is for a permanent cure with the best results. Approaching the anatomic, location and histologic features. Mohs micrographic surgery is primary surgical treatment option for nodular BCC [1]-[3], [5].

II. CASE ILLUSTRATION

An 83 years old lady, brought to clinic for unhealed wound on her left cheek. Prior to the wound, her daughter had noted: it started like a blackish mole around 2 years ago, with no other symptoms. However, 6 months ago she had fallen down in bathroom, which resulted a slight wound on that mole. Ever since that wound had been treated with Gentamycin cream with no improvement, instead it’s growing into surrounding areas and bleeds easily. Patient had past history of contracture of right knee due to trivial injury more than 3 years ago. Patient also suffered heavy senile dementia since many decades ago. Physical examinations revealed general condition of cachexia with slight malnutrition and anaemia. On left eye yellowish mucous discharges was found and retracting of the whole lower eye lid due to heavy nodule. On Left cheek under the lower eye lid was found an irregular nodule covered by brownish crusting, fragile crusts, several bleeding spots, erythematous and oedema on surrounding areas. Diameter 2.5 X 2.5 cm. noted a small hyperpigmented nodule diameter 0.6 X 0.6 cm underneath. We assessed the patient as suspect of irritated nodular BCC with secondary infection and treated initially with Azithromycin 500 mg once daily and Fusidic acid ointment applied locally (Fig. 1).

Fig. 1. Second follow up after 13 days.
After thirteen-day evaluation, surgeon decided to do surgical excision to the lesion. Excision was made with 0.5 cm bordered excision with skin flap, and wide undermining. Surgery was done under local anaesthesia. Clinical images during surgery are seen in Fig. 2.

Histopathological result of the lesion showing BCC infiltrative, nodule type, with bottom sites still have tumour cell. After the surgery, patient wound shown to improve. Follow up 1 year after surgery can be seen in Fig 3.

III. DISCUSSION

Nodular BCC is the most common form of BCC, where pigmented BCC as its subtype. As nodular BCC continues to enlarge, the overlying upper layers of epidermis become thinner, and exposing the blood vessels. BCC occurs mostly in sun exposed areas, particularly on face. Ultraviolet light exposure plays a significant role in the pathogenesis [1]-[3], [4]-[6].

In this case, BCC presented as a blackish mole in central face area which gradually invades to deeper layer of the skin and expands periphery. Patient had routine indirect sun exposure in the morning for around two hours several times weekly.

Mohs Micrographic Surgery (MMS) being the gold standard of surgical treatment, with up to 99% cure rate. In high risk areas of BCC, it is preferred to use MMS, followed by Standard excision then Curettage & Electrodesication [1], [3], [5], [6], [9].

A wide excision and skin flap under local anaesthesia with lidocaine plus epinephrine had been chosen, regarding her general weakness, which perhaps causing an intolerably to undergo general anaesthesia. Unique conditions during the procedure had been addressed while still maintaining the aseptic and antiseptic conditions. Patient’s daughter had to sit beside her for holding the patient’s hand in order to keep away from operation sites, and to avoid unnecessary movements, while providing drinking water.

Surgeon decided to keep a melanocytic nevus underneath the tumour site, which shows no signs of malignancy, due to the wide excisions to prevent lower eye lid retraction and wide scars of skin flap.

Keeping persistent to cut the periphery side of 0.5 cm from tumour site, however, the bottom side shown tumour had invaded to the deeper layer reaching the SMAS layer and showing many arterial formations, since the patient’s skin was very thin and almost had no subcutaneous layer. Therefore, while removing of the bottom side tumour had caused those arterial and stromal formations kept bleeding massively, hence, need another handling bleeding methods with circular arterial suturing and cauterezation. Amid cauterization of the bleeding perhaps had resulted a removal of the adherent tumour which is adjacent to the SMAS layer [3], [4], [8]. Consequently, the histopathology result showing the bottom side still have tumour cell.

Fortunately, patient has loose skin. Therefore, with wide undermining and skin flap had enough to cover that wide excision site, in order to prevent the retraction. However, the result after procedure still had showed a slight retraction on the middle side of the left lower eye lid. However, compared to prior to excision the left lower eye lid which shown the whole lower eye lid retracted heavily due to the heavy tumour nodule, and caused a weeping conditions of the left eye [3].

Prompting concerns with the pathology result which shows that the bottom layer still has tumour cell. Periodic follow up for 2 years had been performed. Based on literature which shows the recurrences result from inadequate treatment, usually seen during the first 4 – 12 months after treatment, and a minimum 5 years follow up is indicated, so further follow up is recommended at least annually. It is advised to continue a searching for new lesions, since the development of second BCC is common. The need for sun protection using sunscreen and avoidance of excessive sun exposure is recommended [3], [4].

IV. CONCLUSION

BCC is the most common cancer in human, which occurs mostly in sun exposed areas. UV light has shown to be a major role in the pathogeneses of BCC. In this case the lesion started like a blackish mole around 2 years prior, which then grows into surrounding areas and bleeds easily. In this case wide excision and skin flap under local anaesthesia had been chosen, due to patient’s general condition which made her intolerably to undergo general anaesthesia. Although bottom
sites still have tumour cell, patient’s wound shown to improve. Recurrence is quite common in BCC case, which is why routine check-up is advisable annually for minimum of 5 years.

CONFLICT OF INTEREST

Authors declare that they do not have any conflict of interest.

REFERENCES