



CASE DESCRIPTION

Atypical debridement of necrotic tissue with natural maggot infestation in a neglected skin cancer female patient

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Introduction

Basal cell carcinoma is the most common skin tumour in the Caucasian population and most common skin cancer worldwide [1, 2]. It is most often present on sun-exposed skin of the head, face and neck but is also noted on the trunk and extremities. The tumour seldom metastasizes and is rarely a cause of death [2]. People over 60 are most commonly affected but it can be detected in younger persons, too. Predisposing factors include childhood solar radiation exposure, male sex, infections with human papilloma virus, Fitzpatrick scale type I and II skin type, immunosuppression, exposure to chemical substances such as arsenic or hydrocarbons, ionizing radiation, a diet rich in fats and alcohol consumption [2, 3]. Diagnosis is based initially on physical examination, followed by dermatological (dermatoscopic) findings and precise pathological examination of the biopsy specimen to determine the tumour type. The mainstay of treatment is surgical resection, although other methods are also used, e.g. Mohs micrographic surgery, ablation technique, cryosurgery, laser therapy. Non-surgical methods described in the medical literature include topical pharmacological

treatment, photodynamic therapy, radiotherapy and chemotherapy [3].

Patient description

An 80 years-old female patient was brought to Accident & Emergency Department of a hospital in southern Poland by ambulance, presenting with a large ulcerative lesion covering most of the right side of her face and the nose. The wound was approximately 15×12cm and encompassed the right eye socket with missing eye bulb; one could see moving maggots surrounded by liquefied tissues. The patient was in poor general status, not able to move and with very little mental contact, severely dehydrated with yellowish skin colour and visibly malnourished and hygienically neglected (Figure 1).

The patient was found by accident during a police intervention in a flat inhabited by her alcoholic son. By accounts of her son, she was recently bedridden and an ulcerating lesion on her face was possibly noted many months before. There was no medical care sought and the sanitary conditions in the living quarters were very poor.

Images



Figure 1. View of the patient's face during admission.



Figure 2. View of the patient's face after mechanical removal of the larvae and first wash with saline.

Treatment

The lesion was washed with saline and the maggots were removed mechanically with tweezers (Figure 2). After further saline cleansing, the large wound was covered with an Argosulfan (Jelfa, Poland) dressing. No oral

or i.v. antibiotics were used. Treatment of the patient also included correction of her electrolyte imbalance with i.v. rehydration and electrolyte replenishment followed by thorough hygienic procedures. Upon improvement of her general status, the patient was then transferred to a medical ward



awaiting full diagnostics and possible surgical cosmetic workup of the lesion. Having in mind the most probable tumorous and malignant background of her facial lesion, she will need to undergo full histopathological examination to see whether any wider surgical intervention is needed. In our opinion the patient is suffering from basal cell carcinoma (*Ulcus rodens*) which is rarely fatal unless it is met with such neglect. The patient lost her eye and extensive damage to all facial tissues was present.

Maggot Debridement Therapy (MDT) is an FDA approved form of treatment in USA with high rates of success. In such case, the sterile MDT larvae are purchased and placed over hard-healing wounds in special dressings. In this case the “maggot therapy” was atypical, unlike MDT, not only for the fact that the patient had substantial tissue damage with exposure of cavities, eye socket, etc. which may be a contraindication for MDT, but also for the fact that maggot infestation was natural, being therapeutic in itself. We consider that owing to this natural maggot infestation, which resulted in spontaneous debridement of the necrotic, cancerous tissues the patient was able to survive.

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