

# Symptom management and palliative care in advanced basal cell carcinoma

## *Opieka paliatywna w zaawansowanym raku podstawnokomórkowym skóry*

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### Abstract

Basal cell carcinoma (BCC) is the most frequent malignant neoplasm of the skin. If a neoplasm is recognized and an accurate treatment is implemented, the prognosis is very positive. However, negligence of the neoplasm could lead to infiltration of the adjacent bone, cartilaginous or vascular structures as well as the eyeball, which could result in its damage and anatomical deformations. The presented case illustrates the possible aggressive and destructive impact of facial skin basal cell carcinoma with rare involvement and destruction of the underlying bone. Long-term growth of the neoplasm resulted in an ulcerative lesion of the forehead area, disability, severe depression and social isolation, as well as numerous somatic complications. This article presents the issues and challenges of palliative care of a patient with advanced facial skin cancer.

**Key words:** BCC, surgery, palliative medicine.

### Streszczenie

Rak podstawnokomórkowy (BCC) jest najczęstszym nowotworem złośliwym skóry. W przypadku rozpoznania nowotworu we wczesnym stadium i wprowadzenia właściwego leczenia BCC rokowanie jest bardzo dobre. Długo nieleczone zmiany mogą jednak naciekać sąsiadujące struktury kostne, chrzęstne, naczyniowe lub gałkę oczną i prowadzić do ich zniszczenia oraz deformacji anatomicznych. Przedstawiony przypadek ilustruje niszczący wpływ zaawansowanego raka podstawnokomórkowego skóry twarzy o wieloletnim przebiegu z zajęciem i destrukcją kości czaszki. Długotrwały wzrost nowotworu stał się przyczyną: głębokiego owrzodzenia skóry twarzy, niepełnosprawności, izolacji społecznej i ciężkiej depresji pacjentki, a także licznych powikłań somatycznych. W artykule przedstawiono metody stosowane w paliatywnej terapii pacjentów z zaawansowanym rakiem skóry twarzy.

**Słowa kluczowe:** podstawnokomórkowy rak skóry, chirurgia, medycyna paliatywna.

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### INTRODUCTION

Basal cell carcinoma (BCC) is the most frequent malignant neoplasm of the skin (over 80% of cases). It usually occurs in areas particularly exposed to ultraviolet radiation, which is the disease's main causative factor. In approximately 70% of cases, the primary tumor is located on the skin of the face and neck [1–3]. Because of BCC's slow growth and local malignancy, over 95% of cases can be diagnosed at an early stage and fully cured [1]. However, due to a lack of pro-health behaviors, BCC can develop

to a stage which makes standard ways of treatment insufficient or impossible to perform. Being locally malignant over a long period of time, BCC can lead to infiltration and damage of adjacent bone, cartilage, vascular or neural structures. This can result in occurrence of ulcerations, severe bleeding and significant anatomical deformations that are particularly unpleasant for patients, as they usually concern the face and neck area of the skin [4, 5]. This could lead to social stigmatization, loneliness and mental suffering of the patients, as well as numerous somatic complications.

## CASE DESCRIPTION

A 62-year-old woman was admitted to the palliative care department due to extensive neoplastic ulceration caused by left-side forehead area BCC resulting in extensive destruction of the left frontal bone, bleeding, pain and one sided sight loss. The first symptoms of the disease started in 2007 in the form of a small, painless tumor. The clinical diagnosis of basal cell carcinoma was confirmed by punch biopsy of a skin specimen from the forehead. Surgical excision of the lesion was performed with direct closure with tissue expansion. One year after the surgery the patient noticed reappearance of the tumor at the site of prior excision. Although she suspected that the lesion was associated with recurrence of basocellular cancer, she refused to report for any follow-up visits at her oncological outpatient clinic and also refused any diagnostic procedures or treatment of the growing tumor, which was suggested by her general practitioner for about 9 years.

Over the course of the years, slow but steady growth of the neoplasm resulted in painful and bleeding ulceration as well as sight loss in the left eye due to infiltration of the neoplasm. As the growing facial lesion was unaesthetic and embarrassing, the patient developed an aversion to interaction with other people and to leaving the house, which resulted in severe depression. During the course of her disease, the patient refused to undergo any diagnostics or treatment of the lesion, and due to her unhygienic lifestyle, she developed multiple comorbidities: hypertension, diabetes, ischemic heart disease and obesity. After total both sided sight loss (as a result of a cataract in her right eye) she decided to start oncological diagnostics and treatment. A histopathological examination of tissue confirmed the diagnosis – recurrence of BCC.

Due to a lack of patient's consent for any radical treatment, symptomatic therapy in the stationary palliative care department was implemented. It included analgesic therapy using a transdermal fentanyl system in a dose of 50 µg/h, changed every 72 h, and short acting sublingual tablets of self-administered fentanyl 100 µg per dose; a regular schedule of hydrogel and absorbent, silver, adhesive bandage (Atrauman Ag) changing; and local pharmacotherapy with a cream containing 5-fluorouracil implemented for topical use, although, for economic reasons, the patient has decided to suspend its usage. The treatment has allowed significant purification of the wound, reducing the discharge and necrosis, good pain control (2 on the Visual Analogue Scale), a reduction in the intensity of negative somatic symptoms of the neoplastic disease (rated using the modified Edmonton Symptom Assessment Scale) from 5.45 to 4.2 after two weeks of hospitaliza-

tion, as well as a reduction of depression intensity (rated using Yesavage's Geriatric Depression Scale) from moderate to mild. The improvement of the patient's well-being during the stay at the department convinced her to undergo palliative radiotherapy (20 Gy in 5 fractions over 5 days, repeated after an interval of 3 weeks). Due to the severity of side effects and deterioration of the patient's condition (poor performance), radiotherapy was withheld without completion of the course of treatment. Further therapy has been limited to symptomatic treatment performed at the department. Due to the advanced stage of the disease, the patient is currently receiving at-home hospice care.

## COMMENT

Recently there has been a significant growth in the number of cases recognized as BCC at an early stage. As the malignancy's appearance and location are rather distinctive, an initial BCC diagnosis can even be made during an objective examination. However, as the described case shows, there are still patients suffering from an advanced neoplasm caused by a long-lasting BCC or a particularly aggressive tumor [6, 7]. Skin BCC is generally associated with a positive prognosis and, in most cases, can be fully cured. The treatment of choice is usually in the form of a surgery, during which the tumor is cut out along with a margin of healthy tissue [7, 8]. The effectiveness of the surgery can reach over 90% and results in the smallest probability of recurrence among the available treatment methods as well as ensuring an optimal aesthetic effect. The resection takes place within the healthy tissue, including a later reconstruction of the structures removed. In most cases of BCC, especially within the facial area, determination of the resection margin is anatomically limited, as it is in close proximity to important facial structures [8]. The existing research reports from 10% to 67% of recurrences after incomplete resection. The recurrence rate of BCC with negative histopathological margins is estimated to be between 5% and 14% [9–11].

Radiotherapy (RT) is an alternative to surgery for primary treatment when the surgery is contraindicated, at anatomical sites where this approach is likely to lead to a superior cosmetic or functional outcome. Also, radiotherapy can be used as an adjunct to surgery in high-risk BCC (multiple recurrences, subtotal excision, lymph node or gland invasion) [12, 13].

In the situation where radical treatment is precluded due to patient-related factors (poor performance status) or tumor-related factors (depth of invasion, size, location), palliative radiotherapy may be recommended. The treatment should be deliv-

ered in the shortest possible time for the patients' and caregivers' convenience. The results of a number of studies show statistically significant negative symptom relief (> 50%) and improvement of quality of life among patients with advanced BCC of facial skin after implementation of palliative radiotherapy [14–17].

In terms of skin cancer, palliative care mainly concerns the control of pain, psychosocial issues related to unaesthetic skin lesion, control of bleeding as well as reducing the possibility of infections. Pharmacological palliative treatment usually involves imiquimod and 5-fluorouracil in a creamy formula [18]. It is recommended to apply a cream formula and occlusal bandages that should be changed five times per week. Serious skin lesions and neoplasm-based ulcers require topical and systemic antibiotic therapy, and bandages reducing the amount of discharge and slough as well as absorbing unpleasant smells. One of the most important aspects of palliative therapy concerning patients suffering from an advanced tumor is analgesic treatment provided according to the WHO guidelines' "analgesic ladder". A subjective evaluation of a patient's level of pain is extremely important and should be performed using the Numerical Rating Scale (NRS), which allows a numerical value to be assigned to the level of pain and, in effect, makes it measurable [19]. An untreatable skin lesion caused by a neoplasm, especially in an area that cannot be covered (the face and neck) is a huge issue, both somatic and psychosocial, for patients and their carers. It relates not only to severe pain, inflammation, necrosis, effusion or bleeding, but also to unaesthetic appearance and an unpleasant smell, which both could lead to the patient's isolation from society, loneliness and depression. During the terminal phase of their disease, patients face the challenge of accepting their untreatable condition and its irreversible consequences such as pain, anxiety, fear or a lack of basic functions. They frequently experience negative emotions – gloom, anger or rejection – which are the result of feeling helpless and losing control over their own life (which will slowly appear as they become more and more dependent on their families and medical staff). Psychotherapy conducted by a professional psychologist aims to give direction to the patient's defense mechanisms, so they could serve as a form of adaptation. Cooperation with a cleric and support of volunteer caretakers can also help in achieving this goal [20, 21].

## CONCLUSION

The presented case highlights that long-term negligence of a growing skin lesion caused by BCC

could lead to significant destruction of tissue, development of skin ulceration, and the patient's social isolation and depression, all of which afflicted this patient. It is necessary to educate patients in terms of self-inspection and diagnostics of suspicious skin lesions and other disturbing symptoms that could indicate development of a serious disease. It is also worth noting that palliative therapy is crucial for the high quality of life of patients who do not qualify for curative therapy.

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## REFERENCES

1. Bartoš V, Kullová M. Non-melanoma Skin Cancer – a Clinicopathological Study of Patients with Basal Cell Carcinoma and Squamous Cell Carcinoma. *Klin Onkol* 2017; 31: 40-45.
2. Bakshi A, Chaudhary SC, Rana M, et al. Basal cell carcinoma pathogenesis and therapy involving hedgehog signaling and beyond. *Mol Carcinogen* 2017; 56: 2543-2557.
3. Madan V, Lear JT, Szeimies RM. Non-melanoma skin cancer. *Lancet* 2010; 375: 673-685.
4. Ryu WC, Koh IC, Lee YH, et al. Concordant Surgical Treatment: Non-melanocytic Skin Cancer of the Head and Neck. *Arch Craniofac Surg* 2017; 18: 37-43.
5. Tchernev G, Voicu C, Mihai M. Basal Cell Carcinoma Surgery: Simple Undermining Approach in Two Patients with Different Tumour Locations. *Maced J Med Sci* 2017; 5: 506-510.
6. Puig S, Berrocal A. Management of high-risk and advanced basal cell carcinoma. *Clin Transl Oncol* 2015; 17: 497-503.
7. Marzuka AG, Book SE. Basal Cell Carcinoma: Pathogenesis, Epidemiology, Clinical Features, Diagnosis, Histopathology, and Management. *Yale J Biol Med* 2015; 88: 167-179.
8. Luz FB, Ferron C, Cardoso GP. Surgical treatment of basal cell carcinoma: an algorithm based on the literature. *An Bras Dermatol* 2015; 90: 377-383.
9. Fernanda L, Santamaría JR, de Melo Garbers LEF. Recurrence rate of basal cell carcinoma with positive histopathological margins and related risk factors. *An Bras Dermatol* 2017; 92: 58-62.
10. Armstrong LTD, Magnusson MR, Guppy MPB. The Role of Embryologic Fusion Planes in the Invasiveness and Recurrence of Basal Cell Carcinoma: A Classic Mix-Up of Causation and Correlation. *Plast Reconstr Surg Glob Open* 2015; 3: 582.
11. Rieger KE, Linos E, Egbert BM, et al. Recurrence rates associated with incompletely excised low-risk nonmelanoma skin cancer. *J Cutan Pathol* 2010; 37: 59-67.
12. Newlands C, Currie R, Memon A, et al. Non-melanoma skin cancer: United Kingdom National Multidisciplinary Guidelines. *J Laryngol Otol* 2016; 130: 125-132.
13. Rong Y, Zuo L, Shang L, et al. Radiotherapy treatment for nonmelanoma skin cancer. *Expert Rev Anticancer* 2015; 15: 765-776.
14. Soni A, Kaushal V, Verma M, et al. Comparative Evaluation of Three Palliative Radiotherapy Schedules in Locally Advanced Head and Neck Cancer. *World J Oncol* 2017; 8: 7-14.
15. Ghoshal S, Patel F, Mudgil N, et al. Palliative radiotherapy in locally advanced head and neck cancer: A prospective trial. *Indian J Palliat Care* 2004; 10: 19-23.
16. Berking C, Hauschild A, Kölbl O, et al. Basal Cell Carcinoma—Treatments for the Commonest Skin Cancer. *Dtsch Arztebl Int* 2014; 111: 389-395.

17. McPartlin AJ, Slevin NJ, Sykes AJ, et al. Radiotherapy treatment of non-melanoma skin cancer: a survey of current UK practice and commentary. *Brit J Radiol* 2014; 87: 501.
18. Thacker CA, Weiss GJ, Tibes R, et al. 18-FDG PET/CT assessment of basal cell carcinoma with vismodegib. *Cancer Med* 2012; 1: 230-236.
19. Rau KM, Chen JS, Wu HB, et al. The impact of pain control on physical and psychiatric functions of cancer patients: a nation-wide survey in Taiwan. *Jpn J Clin Oncol* 2015; 45: 1042-1049.
20. Verhofstede R, Smets T, Cohen J, et al. Implementing the care programme for the last days of life in an acute geriatric hospital ward: a phase 2 mixed method study. *BMC Palliat Care* 2016; 15: 27
21. Walshe C, Dodd S, Hill M, et al. How effective are volunteers at supporting people in their last year of life? A pragmatic randomised wait-list trial in palliative care (ELSA). *BMC Med* 2016; 14: 203.