FROM NEGLECT TO METASTASIS – A GIANT ABDOMINAL BASAL CELL CARCINOMA

ZANEMARIVANJEM DO METASTAZA – DŽINOVSKI ABDOMINALNI BAZOCELULARNI KARCINOM

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Case report
Prikaz slučaja
UDK 616.5-006.6-033.2
https://doi.org/10.2298/MPNS2412344T

Abstract

Introduction. Basal cell carcinoma, or basalioma, is the most common type of skin cancer. It typically develops on sun-exposed areas such as the head and neck, but occurrences on the abdomen are rare. Basal cell carcinoma is characterized by slow progression and low risk of metastases due to early detection and treatment. As a result, giant basal cell carcinomas, exceeding 5 cm in diameter, are uncommon. **Case Report.** We present the case of a 66-year-old woman diagnosed with basalioma. A decade earlier, she noticed a small skin lesion on her abdomen that gradually enlarged. By the time she sought medical attention, the lesion had reached 20 x 30 cm, infiltrating the anterior abdominal wall, muscles, and peritoneum. Surgical management included tumor excision, the elevation of two large transposition myocutaneous flaps, and coverage of residual skin defects with free partial-thickness skin transplants. At the three-month postoperative follow-up, no signs of recurrence were observed. However, the patient missed the subsequent check-ups for personal reasons, resulting in delayed detection of a recurrence. Two and a half years later, clinical examination revealed a local relapse. Magnetic resonance imaging identified two ulcerative lesions, measuring 7 cm and 9 cm in diameter, connected by a bridge-like tissue formation infiltrating deeper structures, including the liver capsule and intestinal walls. At this advanced stage, surgical intervention was deemed unfeasible. **Conclusion.** Although basalioma is typically detected and treated early, neglected cases can result in giant lesions with significant local invasion, and even organ involvement. Educating patients on the importance of adherence to follow-ups is essential to prevent such adverse outcomes.

Key words: Abdominal Wall; Abdomen; Carcinoma, Basal Cell; Skin Neoplasms; Neoplasm Metastasis; Myocutaneous Flap; Recurrence; Medical Neglect

Sažetak

Uvod. Bazocelularni karcinom (bazaliom) najčešći je oblik karcinoma kože. Obično se javlja na područjima koja su izložena suncu, kao što su glava i vrat, dok je prednji trbušni zid retka lokalizacija po učestalosti. Bazaliom je poznat po sporom napredovanju i retkim pojavama metastaza usled ranog otkrivanja i lečenja. Zbog toga retko raste kao džinovski bazaliom sa prečnikom većim od 5 cm. **Prikaz slučaja.** Žena stara 66 godina javila se na pregled zbog tumora prednjeg trbušnog zida. Deset godina ranije primetila je malu leziju kože na stomaku koja je progresivno rasla. Kada se javila lekaru, dimenzije lezije su bile 20 x 30 cm, infiltrirala je prednji trbušni zid, mišiće i peritoneum. Tumor je hirurški uklonjen, korišćena su dva velika transpoziciona miokutana režnja, a slobodni transplantat parcijalne debljine kože je korišćen za prekrivanje zaostalog defekta kože. Tri meseca nakon operacije nije bilo znakova recidiva. Lični razlozi ometali su kasnije kontrolne preglede, što je dovelo do neprimećenog relapsa bolesti. Dve i po godine kasnije klinički pregled je pokazao lokalne recidive, dok su magnetnom rezonancijom identifikovane dve ulcerativne lezije, prečnika 7 i 9 cm, koje su bile povezane supkutano, stvarajući formaciju nalik mostu koja je probila kapsulu jetre i zidove creva. U ovoj fazi dalje hirurško lečenje nije bilo moguće. **Zaključak.** Uprkos mogućem ranom otkrivanju i uspešnom lečenju bazalioma, zanemareni slučajevi mogu se javiti sa lezijama koje postaju džinovske u prečniku, pa čak i zahvatati druge organe. Potrebno je edukovati pacijente o karcinomima kože, ali i važnosti komplijanse, jer to značajno doprinosi izbegavanju neželjenih ishoda.

Ključne reči: prednji trbušni zid; abdomen; bazocelularni karcinom; tumori kože; metastaza; miokutani režanj; recidiv; zanemareni medicinski slučaj

Introduction

Basal cell carcinoma (BCC) is the most prevalent malignancy and the leading form of skin cancer [1]. Originating from the basal layer of the epidermis and adnexal structures, its primary etiological factor is ultraviolet (UV) radiation exposure. Individuals with fair skin, light-colored eyes, red hair, northern European ancestry, advanced age, childhood freckling, and a history of frequent sunburns are at heightened risk of developing this cancer [2]. Despite its high incidence, BCC typically has a favorable prognosis

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Abbreviations

BCC – basal cell carcinoma
UV – ultraviolet
GBCC – giant basal cell carcinoma
MRI – magnetic resonance imaging
NCCN – National Comprehensive Cancer Network

when identified and treated early [1]. In rare instances, BCC may grow to exceed 5 cm in diameter, classifying it as a giant basal cell carcinoma (GBCC), a condition accounting for approximately 0.5% of cases [3]. GBCC demonstrates aggressive biological behavior, infiltrating deep tissues, including dermis, bone, muscle, or cartilage, and may even metastasize, leading to a poorer prognosis [4]. Exceptionally, when a lesion surpasses 20 cm in diameter, it is classified as super giant basal cell carcinoma, underscoring its rarity and clinical significance [3]. The anatomical distribution of GBCC differs from typical BCC. While BCC predominantly affects the head and neck, GBCCs also occur on the trunk and upper extremities, often in areas less accessible for self-examination. Most patients present with GBCC around age 67, with a male predominance (2:1), and incidence peaks in those over 70 [5]. Treatment for GBCC typically involves surgical excision with wider margins (10 mm) to mitigate the significant risk of residual tumor (up to 68%) [5]. Deep excisions often require reconstructive techniques, including split-thickness graft, or local regional, or free flap to address the resulting defect [5]. Here, we report a case of a female patient in her seventh decade with a GBCC on the abdomen, an uncommon site. The lesion's size and the patient's lack of compliance during postoperative follow-up emphasize the critical importance of patient adherence to medical recommendations.

Case Report

A 66-year-old woman presented to the outpatient department of the Clinic for Plastic and Reconstructive Surgery of the University Clinical Center of Vojvodina with a large abdominal skin lesion. She reported noticing a small reddish spot about ten years earlier, which gradually grew over time. The lesion, predominantly affected the anterior abdominal wall on the right side, exhibiting an exulcerative surface, punctate bleeding, foul odor, and purulent discharge at its center. The lesion measured approximately 20 x 30 cm and had multiple satellite lesions at its periphery **(Figure 1).** A partial biopsy and histopathological findings confirmed the diagnosis of BCC. Imaging studies, including ultrasound of the abdomen, inguinal, and axillary lymph nodes, as well as chest X-rays, revealed no signs of metastasis.

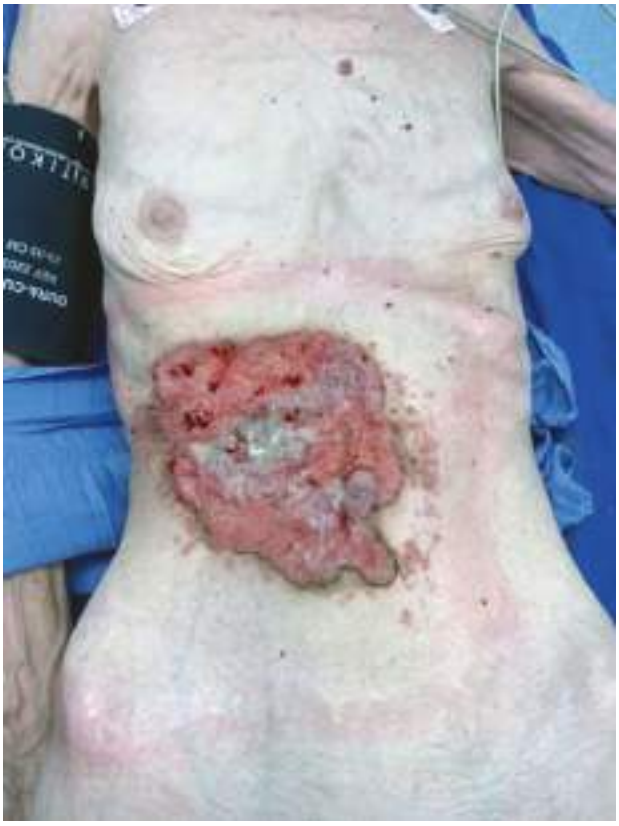

Figure 1. GBCC when first diagnosed

Surgical intervention involved complete excision of the tumor. Intraoperative findings showed infiltration of the anterior abdominal wall structures, including muscles and peritoneum. The peritoneum defect, measuring 10 x 8 cm, was repaired using a nylon mesh. Two large transposition myocutaneous flaps were raised, and the remaining defects were covered with free partial-thickness skin grafts. The surgery and postoperative recovery were uneventful. Histopathological analysis confirmed fat and muscle infiltration, with free lateral margins but close proximity to the deep margin. Adjuvant radiotherapy was not recommended by the oncology team. Three months postoperatively, the patient exhibited no signs of local recurrence or palpable regional lymph nodes. Follow-up imaging, including magnetic resonance imaging (MRI), ultrasound of the abdomen, inguinal, and axillary regions, and X-rays of the heart and lungs, showed no evidence of residual disease.

Despite initial follow-up, the patient missed subsequent appointments due to personal reasons. Two years later, relapse significant local recurrence was identified. Clinical examination revealed two ulcerative lesions, measuring 7 and 9 cm in diameter, along with a satellite lesion in the paraumbilical region **(Figure 2).** MRI demonstrated that the two ulcerative lesions formed a bridge-like structure in the deeper layer, disrupting

Figure 2. Local relapse two years post-op

the liver capsule and intestinal walls **(Figures 3A and 3B).** Additionally, a multilocular cystic tumor measuring 51 x 72 x 76 mm (AP x LL x CC) was identified in liver segments S4b and S5. The tumor had breached the liver capsule and was directly connected to the

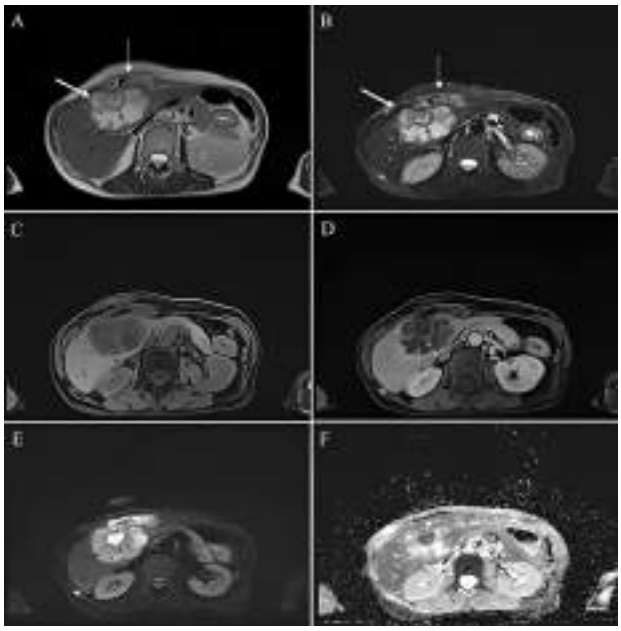

Figure 3. A: MRI demonstrating disruption of the liver capsule and **B:** connections with the anterior abdominal wall

ulcerative lesions on the anterior abdominal wall. Given the extent of disease progression, surgical intervention was deemed unfeasible.

Discussion

GBCCs are relatively rare, largely due to the widespread early treatment of BCCs that prevents tumors from reaching such large sizes. However, late-presenting cases of GBCC are still encountered. Several factors have been associated with the development of GBCC, including residence in rural areas, alcohol consumption, occupational exposure, psychophysical disorders, low socioeconomic and educational status, and insufficient social or family support [6].

Research suggests that female patients may have a higher propensity to neglect skin lesions [5]. While the mean age of GBCC patients is typically over 65, recent studies indicate that its occurrence is more common in individuals aged 75 and older [7]. The average duration of GBCC lesions is significantly longer than that of conventional BCCs, with reports indicating a mean duration of 109.7 months, suggesting that many patients may are aware of their lesions but disregard their potential severity [5]. The anatomical distribution of GBCC differs from that of conventional BCCs. Although the head and neck are the most common sites for BCCs, trunk involvement is rare, accounting for only 10% of cases. In contrast, GBCCs have a higher prevalence on the trunk, with an incidence of approximately 30% [4]. An Italian multicentric study reported an average tumor size of 7.3 cm for GBCCs and found a positive correlation between tumor size and metastatic potential [5].

According to the TNM classification, GBCCs are typically classified as T3 BCC and are categorized as high-risk BCCs under the National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines. While BCCs generally have a low metastatic potential, GBCCs, especially those exceeding 10 cm, are at increased risk of metastasis [6]. The National Comprehensive Cancer Network also evaluates basal cell carcinomas through their risk of relapse, so lesions larger than 20 cm on the trunk are considered high-risk for recurrence [2]. GBCCs are characterized by a higher incidence of tumor cell atypia and pleomorphism, approximately three times greater than that of conventional BCCs, further increasing the risk of local invasion and metastases [8].

Management of GBCC prioritizes wide local excision with histologically clear margins, often requiring reconstructive techniques. For advanced cases involving metastatic spread, adjuvant therapies such as chemoradiotherapy and hedgehog pathway inhibitors

are necessary [9, 10]. Systematic therapies may also reduce the incidence of local invasion, metastases, and recurrence [7]. However, most studies examining risk factors for local recurrence and the role of postoperative radiotherapy focus on BCCs of the head and neck. The treatment of BCCs on the trunk and extremities warrants further investigation [11]. In the present case, the delayed diagnosis highlights the critical importance of early detection and adherence to treatment protocols in preventing poor outcomes.

The primary factors influencing the size of GBCCs at the time of presentation appear to be patient neglect resulting in delayed diagnosis, as well as heightened biological aggressiveness, the cause of which is yet to be determined [12]. In at least 30% of cases, the primary factor contributing to the development of GBCC is neglect causing a delay in seeking medical attention, which averages around 7.5 ± 3.1 years. This delay is often linked to various factors, including poor socioeconomic conditions, inadequate hygiene, mental health issues, advanced age, and the painless nature of BCC lesions [13].

Conclusion

Further research into the diagnosis and treatment of giant basal cell carcinoma is essential. Although only 1% of basal cell carcinomas progress to giant basal cell carcinoma, early detection by physicians or patients can effectively prevent excessive tumor growth and reduce the risk of metastasis, thereby improving outcomes for this rare condition. Early detection is vital in saving the lives of patients with basal cell carcinoma. Education of the general population plays a pivotal role in raising awareness about skin tumors, which are often painless and asymptomatic but can have fatal consequences if neglected. Educating individuals about the importance of regular skin self-examinations and timely medical; intervention is crucial for preventing adverse outcomes.

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Rad je primljen 29. XI 2024.
Recenziran 8. I 2025.
Prihvaćen za štampu 8. I 2025.
BIBLID.0025-8105:(2024):LXXVII:9-12:344-347.