Journal of Population Therapeutics & Clinical Pharmacology

RESEARCH ARTICLE
DOI: 10.53555/heekqe32

SLOW GROWING PROLIFERATIVE SQUAMOUS CELL CARCINOMA OF LOWER BACK REGION - A CASE REPORT AND LITERATURE REVIEW

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ABSTRACT

Background: Cutaneous squamous cell carcinoma (cSCC) is a prevalent non-melanoma skin cancer, predominantly found on sun-exposed areas. However, rare presentations in protected regions such as the lower back are often associated with chronic irritation, non-healing ulcers, or prior indigenous treatments, leading to delayed diagnosis and management.

Aim and Objective: To study the slow growing proliferative squamous cell carcinoma of lower back region - a case report and literature review

Case Summary: We present the case of a 70-year-old female with a 2-year history of an ulceroproliferative lesion on the lower back, initially mismanaged with indigenous therapies. Histopathological analysis confirmed well-differentiated squamous cell carcinoma. Imaging revealed subcutaneous infiltration without nodal involvement. The patient underwent wide local excision (WLE) with flap reconstruction. Histopathology confirmed negative margins, and the postoperative course was uneventful.

Conclusion: This case underscores the importance of early diagnosis, imaging, and surgical management of chronic skin ulcers suspicious for malignancy, especially in elderly patients with comorbidities. Emphasis on community education and timely biopsy of non-healing ulcers is vital for early intervention, particularly in rural settings where indigenous treatments are common.

KEYWORDS:SLOW GROWING, PROLIFERATIVE, SQUAMOUS CELL,CARCINOMA, LOWER BACK,

INTRODUCTION

Cutaneous squamous cell carcinoma (cSCC) is the second most common non-melanoma skin cancer, often associated with ultraviolet (UV) radiation exposure, immunosuppression, chronic wounds, or prior inflammatory skin conditions. While frequently diagnosed on sun-exposed areas like the face, ears, or hands, cSCC can also occur in uncommon sites such as the lower back,

especially in chronic non-healing ulcers [1,2]. Rare presentations often delay diagnosis and appropriate treatment [3].
Squamous cell carcinoma (SCC) arises from the keratinizing cells of the epidermis and presents with various clinical morphologies—plaque, ulcer, or proliferative lesions. It accounts for nearly 20% of all cutaneous malignancies. Though most cSCCs are indolent and localized, certain high-risk forms exhibit aggressive features, including perineural invasion, deep tissue infiltration, and potential for metastasis, particularly when arising in sites of chronic irritation or poor hygiene [4].

SCC of the lower back is a particularly rare and underreported presentation, especially when developing in association with neglected skin lesions, pressure sores, or indigenous treatments. The anatomical site contributes to delayed detection due to inaccessibility and concealment. In the elderly, the scenario is further complicated by comorbidities like diabetes and hypertension, which impair healing and immune surveillance, increasing the risk for malignancy [5].

A chronic ulcer transforming into SCC is termed a Marjolin's ulcer, often diagnosed late due to misattribution to benign processes. The malignant transformation may span months to years and often leads to advanced disease at diagnosis. Differentiation between typical cSCC and Marjolin’s ulcer is essential but can be clinically challenging [6,7].

Histologically, SCC is graded based on differentiation: well, moderately, and poorly differentiated. Well-differentiated SCC, as in this case, shows keratin pearl formation and minimal mitotic activity. The depth of invasion and margin status determine prognosis. Imaging modalities like CECT help evaluate soft tissue extension and lymph node involvement, crucial for surgical planning [8].

Wide Local Excision (WLE) remains the cornerstone of management for localized SCC. Surgical margins depend on the size, differentiation, and risk factors. Low-risk tumors typically require 4–6 mm margins, whereas high-risk or recurrent tumors may require wider excisions. Flap reconstruction techniques, like local transposition flaps, are often employed to achieve tension-free closure and preserve function [9-11].
Prognosis depends on multiple factors—tumor size, depth, perineural or lymphovascular invasion, and immunosuppression. Well-differentiated tumors with clear surgical margins have excellent outcomes [12-15]. However, ongoing surveillance is essential, especially in older adults with comorbidities or those with a history of indigenous treatments, as recurrence or new lesions may develop.
The use of unregulated indigenous therapies and lack of awareness about chronic ulcer malignancy potential contribute to late presentations in rural and underserved populations. Education, early biopsy of non-healing ulcers, and primary care vigilance can reduce advanced-stage diagnoses.

MATERIAL AND METHODS

A 70-year-old female presented to the surgical OPD with a progressively enlarging ulceroproliferative lesion over her lower back of 2 years duration. She had a history of diabetes and hypertension. Clinical evaluation noted an 8×8 cm foul-smelling, cauliflower-like lesion with serous discharge and no regional lymphadenopathy.

Investigations Performed:

Incisional Biopsy: Performed under local anesthesia to confirm malignancy.
Ultrasound of bilateral inguinal regions: To rule out nodal involvement.
CECT Abdomen and Pelvis: To assess the extent of local invasion.

The histopathological evaluation confirmed well-differentiated squamous cell carcinoma (Grade 1). Imaging showed subcutaneous infiltration but no lymphadenopathy.

Treatment Plan:
The patient underwent Wide Local Excision (WLE) with adequate surgical margins, followed by closure using a local transposition flap. Postoperative care involved wound surveillance, antibiotics, and glycemic control. Histopathological examination of the resected specimen confirmed complete excision with negative margins.

CASE
A 70 year old female, known diabetic and hypertensive (on medications), presented with a ulceroproliferative growth with foul smelling discharge on lower back region for past 2 years. She had undergone indigenous treatment over the past one year and the growth was progressive in nature. On clinical examination, she was having a 8x8 cm cauliflower like growth with serous discharge on the lower back region and there was no palpable regional lymph nodes. She was evaluated with incision biopsy, USG of b/l inguinal region and CECT of abdomen and pelvis. Biopsy confirmed it as a well differentiated squamous cell carcinoma. There was no significant inguinal nodes on USG. CECT showed it was infiltrating the underlying subcutaneous tissue. She was operated with Wide Local Excision of the growth and closure was done with local transposition flap. Her postoperative recovery was uneventful. Final HPE revealed it as a well differentiated Grade 1 SCC, all margins were adequate. She is under regular follow up and currently doing well.

Figure 1: Preoperative image showing an 8×8 cm ulceroproliferative, cauliflower-like lesion with serous discharge on the lower back.

DISCUSSION

Cutaneous SCC is commonly associated with UV exposure but can occur in protected areas like the lower back due to chronic irritation or neglected wounds. In this case, prolonged indigenous treatment delayed medical intervention, highlighting a prevalent issue in rural healthcare access.
Recent literature supports this observation. Maheshwari et al. (2024) [12] reported that over 25% of cSCC cases in rural India were initially treated with non-allopathic methods, leading to delayed presentations and larger tumor size at diagnosis. They highlighted that in rural Indian populations, over a quarter of cSCC cases had a history of indigenous or non-allopathic treatment, often contributing to the delay in seeking specialized medical care. Our patient similarly received unregulated therapies, which may have contributed to the lesion's prolonged progression.

Hassan et al. (2025) [15] noted that elderly patients with diabetes are more prone to aggressive tumor biology and delayed wound healing, supporting the need for prompt biopsy in non-healing ulcers.
Lee et al. (2023) [8] emphasized the importance of surgical excision with appropriate reconstruction techniques to ensure both oncological clearance and functional recovery.

In our case, the use of a local transposition flap yielded excellent healing with minimal tension. Sharma et al. (2024) [14] also confirmed that well-differentiated SCCs have favorable outcomes when margins are negative, as in this case. Histopathologically, our case was classified as a well-differentiated squamous cell carcinoma (Grade 1), characterized by keratin pearl formation and minimal mitosis, which usually indicates a favorable prognosis. They emphasized that well-differentiated SCCs with negative surgical margins generally demonstrate low recurrence rates and excellent long-term outcomes.

Histopathology remains the gold standard for diagnosis and grading. Imaging helps in surgical planning and ruling out deeper spread. Zhu et al. (2023) [13] highlighted the sensitivity of CECT in delineating subcutaneous involvement in SCC. In terms of diagnostic imaging, the role of contrast-enhanced CT (CECT) is pivotal, they established the utility of CECT in identifying subcutaneous and soft tissue involvement in cSCC, which was essential in our case to determine surgical margins and exclude lymphadenopathy.

In high-risk patients, continued surveillance is essential. Veness et al. (2021) [9] recommend 6-monthly follow-ups for at least 2 years post-surgery to detect recurrence or new lesions.
Comorbid conditions like diabetes and hypertension not only impair immune function but also contribute to delayed wound healing and tumor aggression. Hassan et al. (2025) reinforced the importance of vigilant follow-up in diabetic patients due to their increased risk of adverse outcomes in cSCC.
Cutaneous squamous cell carcinoma (cSCC) is typically associated with chronic sun exposure and is most commonly found on sun-exposed anatomical regions. However, cases arising in covered areas such as the lower back—like in our patient—are rare and typically stem from chronic irritation, non-healing ulcers, or previous trauma. The malignancy may go unnoticed due to delayed presentation, as patients and healthcare workers alike may attribute such lesions to benign causes or chronic infections.
The lack of awareness among rural populations about the malignant potential of chronic wounds necessitates community-based education and primary care sensitization. Early biopsy and referral can substantially improve outcomes.
Recent studies have reinforced the link between chronic wounds and malignant transformation into squamous cell carcinoma, particularly in elderly populations with comorbidities. In a 2024 observational study by Rao et al., over 30% of chronic ulcers in rural Indian patients were found to have premalignant or malignant changes, yet nearly half had received alternative therapies before

medical evaluation, delaying diagnosis and worsening prognosis. Their findings underscore the necessity for early biopsy of non-healing ulcers, especially in geriatric populations with conditions like diabetes or peripheral vascular disease [16]. Our case reflects this clinical pattern, as the patient delayed seeking allopathic care for nearly two years while relying on indigenous treatments.
Moreover, a 2025 multicenter cohort analysis by Pillai et al. emphasized that lesion site plays a pivotal role in delayed detection. Lesions on the posterior trunk, buttocks, or groin are often ignored until advanced stages, due to their anatomical concealment and lack of symptoms early on. The study found that such presentations were more common among elderly women with restricted mobility and poor access to dermatological care [17]. These findings align with our case, where the lower back lesion remained unnoticed and untreated until it developed into an ulceroproliferative mass requiring surgical intervention.

CONCLUSION

This case illustrates a rare presentation of slow-growing proliferative SCC on the lower back, likely arising from a neglected chronic lesion. Early diagnosis through biopsy, appropriate imaging, and timely surgical intervention ensured a favorable outcome. Public health education and primary care awareness are crucial in identifying high-risk cutaneous lesions in rural populations.

Limitations of the Study

The primary limitation of this case report is its single-patient design, which inherently limits generalizability. While it provides valuable insight into a rare presentation of cutaneous SCC, conclusions drawn cannot be broadly applied to all patients with chronic ulcers or lower back lesions. Additionally, due to the lack of long-term follow-up data, recurrence patterns and disease-free survival could not be assessed comprehensively. Further research with larger cohorts and extended follow-up periods is necessary to establish standardized diagnostic and treatment protocols for such rare tumor locations and patient profiles.

DECLARATIONS:

Conflicts of interest: There is no any conflict of interest associated with this study
Consent to participate: There is consent to participate.
Consent for publication: There is consent for the publication of this paper.
Authors' contributions: Author equally contributed the work**.**

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