

Giant cutaneous squamous cell carcinoma of the hypogastric and perineal region with satellite lesions.

A case report

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Background: Cutaneous squamous cell carcinoma (cSCC) is the second most common skin malignancy worldwide, with a growing incidence attributed to ultraviolet radiation exposure and aging populations. While most cases are diagnosed and managed at early stages, giant forms — defined as lesions exceeding 5 cm in diameter — are exceptionally rare and represent a diagnostic and therapeutic challenge, particularly in low-resource settings with limited access to specialized oncological care. We report a case of a giant cSCC of the hypogastric and perineal region in a rural patient from western Mexico who presented after more than 12 months of symptom progression without medical evaluation.

Case Presentation: A 65-year-old male agricultural worker with a history of chronic sun exposure and sporadic pesticide contact presented with a 12-month history of a progressive, friable, verrucous lesion in the hypogastric region. On examination, the tumor measured 22 × 15 cm, extending from the infraumbilical area to the perianal and perineal region, with satellite lesions on the pelvic limbs. Histopathological biopsy confirmed a well-differentiated invasive squamous cell carcinoma (depth 1 mm, pushing-type invasion pattern). Computed tomography of the abdomen and pelvis showed no visceral involvement or distant metastasis. The tumor was staged as T4b, N0, M0 (AJCC 8th edition, Stage III). The patient underwent wide local excision with bilateral cutaneous rotation advancement flap reconstruction. Postoperative wound care was managed with silver sulfadiazine dressings. The patient was discharged on postoperative day 7 and referred for adjuvant oncological evaluation in accordance with NCCN 2024 guidelines.

Conclusion: Giant cSCC remains a rare but clinically significant entity associated with delayed diagnosis, limited healthcare access, and complex surgical management. This case highlights the importance of early dermatological screening in rural populations with high ultraviolet exposure, and underscores the need for multidisciplinary oncological strategies in resource-limited settings. Surgical resection with adequate margins, combined with adjuvant therapy, remains the cornerstone of treatment for locally advanced disease.

Keywords: Negative-Pressure Wound Therapy, Amputation Stumps, Skin Transplantation

Nayarit, Mexico

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Oncologic Surgery



Cutaneous squamous cell carcinoma (cSCC) is the second most common skin malignancy worldwide, representing approximately 20% of all cutaneous cancers. Its incidence is projected to continue increasing due to rising exposures to established risk factors,¹ including cumulative ultraviolet (UV) radiation, advanced age, immunosuppression, and occupational exposures. Between 1990 and 2019, the global age-standardized incidence rate of cSCC increased by 36.1%, underscoring its growing burden as a public health challenge.²

The majority of cSCC cases are detected at an early stage and successfully treated with surgical excision alone, with favorable long-term outcomes. However, a clinically distinct and therapeutically challenging subset exists: the so-called "giant" cSCC, defined by a maximum tumor diameter exceeding 5 cm. These giant forms usually arise as a consequence of prolonged neglect of a slow-growing lesion, and pose significant challenges in treatment, including high risk of recurrence and metastasis despite aggressive surgical excision.³ Their occurrence is exceptionally rare, and the published literature is limited almost exclusively to isolated case reports.



Figure 1. Giant cutaneous squamous cell carcinoma measuring 22x15 cm.

Delayed diagnosis is a critical determinant of tumor progression in cSCC. Diagnostic delays are associated with a 4.7-times increased risk of more severe tumor invasion and a three-times increased risk of positive surgical margins, compared to timely diagnosis,⁴ significantly impacting both surgical approach and oncological outcomes. In resource-limited settings — particularly rural areas with restricted access to dermatological and oncological services — patients frequently present at advanced stages, having been unable to obtain timely evaluation. Local invasion, delayed diagnosis, and metastasis contribute to increased costs and morbidity in advanced cSCC, and a multidisciplinary team approach is therefore recommended.⁵

In Mexico, cSCC represents one of the most frequent malignant skin tumors, with an incidence that disproportionately affects male agricultural workers over 65 years of age due to sustained occupational UV exposure and historically limited dermatological screening programs in rural communities. Despite the frequency of early-stage disease, advanced and giant forms remain vastly underreported, in part due to the absence of a standardized national skin cancer registry.

We present the case of a 65-year-old male farmworker from the state of Nayarit, Mexico, who developed a giant cSCC of the hypogastric and perineal region measuring 22 × 15 cm, with satellite lesions on the pelvic limbs, following more than 12 months without medical evaluation. This case highlights the diagnostic, surgical, and oncological challenges posed by giant cSCC in a resource-limited rural context, and aims to contribute to the limited body of evidence on the management of this rare and aggressive clinical presentation.

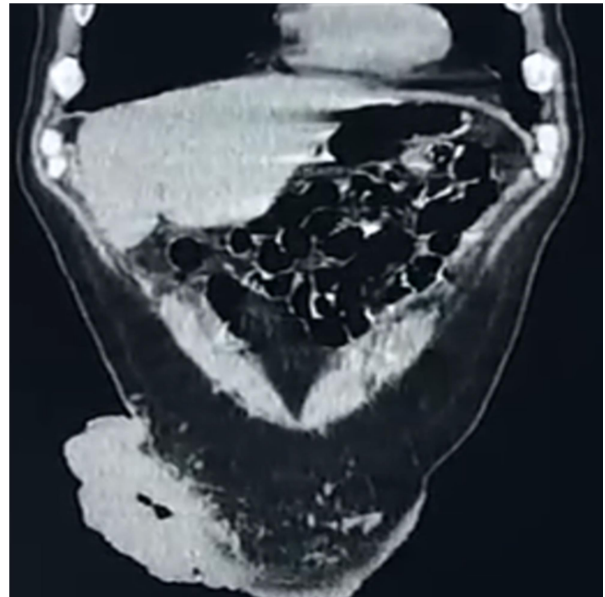


Figure 2. CAT Abdominal showing limited lesion without abdominal infiltration.

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Wide local excision with bilateral cutaneous rotation-advancement flap reconstruction was the treatment of choice in our patient, consistent with current guidelines. Surgical resection with intraoperative margins greater than 2 cm remains the fundamental strategy, with a 95% cure rate with negative margins.⁷ In the series by Mateuszczyk et al. (2024), four of the seven patients (57.14%) underwent primary radical surgical excision with R0 resection, using skin grafts to close the defect in three of them.⁷ In our case, the reconstructive approach — bilateral rotation flap rather than skin grafting — was selected due to the anatomical characteristics of the perineal and hypogastric region, where graft take may be compromised by proximity to contaminated areas and wound tension. This decision reflects the principle that flap-based reconstruction provides superior vascular supply and tissue integrity for complex perineal defects compared to split-thickness grafts.

Our patient's tumor was staged as T4b, N0, M0 (AJCC 8th edition, Stage III), placing him in a high-risk category with an estimated 5-year survival of 30–50%. Among the histopathological prognostic indicators in cutaneous SCC, depth of invasion, surgical margins, perineural invasion, lymphovascular invasion, and extranodal extension are the most relevant determinants for both staging and adjuvant therapy decisions.³ In our case, the pushing-type invasion pattern and the absence of lymphovascular or perineural invasion on the biopsy specimen represent relatively favorable histological features despite the tumor's giant dimensions. However, the definitive histopathological assessment of the surgical specimen

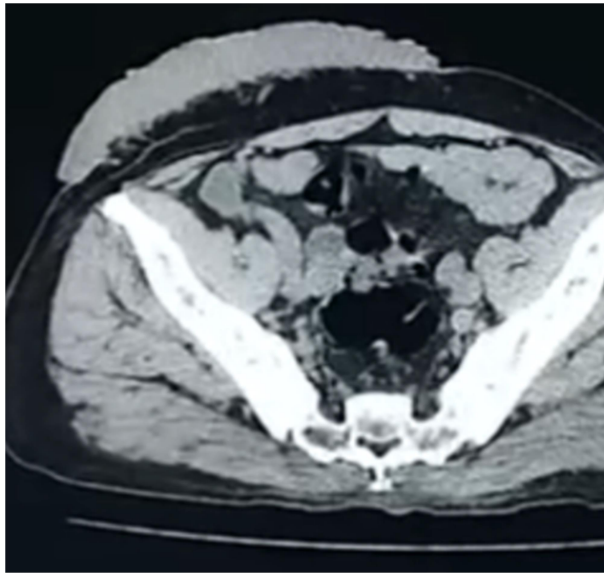


Figure 3. CAT Abdominal showing limited lesion without abdominal infiltration.

including true margin status — remains essential to fully characterize prognosis and guide adjuvant treatment decisions.

The present case illustrates the clinical, surgical, and oncological challenges posed by giant cutaneous squamous cell carcinoma (cSCC) developing in a resource-limited rural setting. Our patient presented with a tumor measuring 22×15 cm, exceeding by a substantial margin the 5 cm threshold used to define giant cSCC in the literature, and involving the hypogastric, perineal, and perianal regions with satellite lesions on the pelvic limbs — a topographic distribution that has rarely been described in published reports.

Following surgical resection, our patient was referred for adjuvant oncological evaluation in accordance with NCCN 2024 guidelines for high-risk cSCC. For locally advanced or unresectable disease, systemic immunotherapy has emerged as a major advance. Immunotherapy has demonstrated the most favorable survival outcomes in advanced SCC, with a median progression-free survival of 9.9 months compared with 3 months for chemotherapy and 4.9 months for EGFR inhibitors.⁹ In our patient, given the successful surgical resection and the current absence of nodal or distant disease, adjuvant radiotherapy to the surgical bed and regional lymph nodes represents the most evidence-based initial approach, reserving immunotherapy for cases of recurrence or residual disease.

Discussion

This case highlights a systemic challenge in the Mexican healthcare landscape: the delayed presentation of potentially curable skin malignancies in rural populations with limited dermatological



Figure 4. Immediate post wide local excision with bilateral cutaneous rotation and advancement of flap.



Figure 5. Perineal region with satellite lesions on the pelvic limbs.

screening. The 12-month diagnostic delay observed in our patient is strikingly consistent with the median treatment delay reported in international reviews of giant cSCC. Early detection programs targeting agricultural workers in high-UV-exposure regions of western Mexico — such as the state of Nayarit — could substantially reduce the incidence of giant and locally advanced forms. Our report has several limitations inherent to its case report design: the absence of long-term follow-up data, the lack of immunohistochemical characterization of the surgical specimen, and the impossibility of generalizing management decisions to other anatomical presentations or clinical contexts. Future prospective

registries of advanced cSCC in Latin America are needed to better quantify the burden of this disease in underserved populations.

The present case illustrates the clinical, surgical, and oncological challenges posed by giant cutaneous squamous cell carcinoma (cSCC) developing in a resource-limited rural setting. Our patient presented with a tumor measuring 22×15 cm, exceeding by a substantial margin the 5 cm threshold used to define giant cSCC in the literature, and involving the hypogastric, perineal, and perianal regions with satellite lesions on the pelvic limbs — a topographic distribution that has rarely been described in published reports.

In a systematic review of 42 well-documented cases of giant extra-anogenital SCC, the median age at presentation was 70 years, 57% of patients were men, and the estimated treatment delay was 12 months at the median.⁶ Our case matches this profile in all aspects: male patient, 65 years old, with exactly 12 months of evolution without medical attention. In the most recent series published in 2024 on giant extra-anogenital SCC, which included 7 cases treated between 2016 and 2022, the majority of patients were men (85.71%) with a mean age of 80 years, and UV radiation was the most frequent risk factor.⁷ That series, in which most of the lesions were located in the head and neck (71.4%), our case presents an abdomino-perineal location with extension to the pelvic limbs, which represents an anatomical variant. The most comprehensive recent analysis of extra-anogenital giant cSCC, published in 2024, provides the most relevant benchmark for our case. Our case aligns with the male predominance and UV-driven risk profile of that series, yet differs in three clinically significant respects: the topographic location (abdominoperineal vs. predominantly craniofacial), the tumor dimensions (22×15 cm vs. a range of 6–18 cm reported in that series), and the healthcare context (rural Mexico with 12-month diagnostic delay vs. a tertiary European dermatosurgery unit). These distinctions underscore the importance of reporting cases from low-resource settings, where both tumor behavior and therapeutic constraints diverge substantially from those described in high-income country literature.³ One of the central lessons of this case is the causal relationship between limited healthcare access and tumor progression to its giant form. This relationship is not anecdotal. In our patient, 12 months elapsed between lesion onset and first medical evaluation — a delay consistent with the median reported in international reviews of giant cSCC, and one that transformed what was likely a resectable early-stage lesion into a Stage III tumor requiring complex multidisciplinary management. This observation carries direct public health implications: the driver of giant cSCC in our patient

was not biological aggressiveness, but systemic healthcare inaccessibility — a modifiable determinant.

Conclusion

Giant cutaneous squamous cell carcinoma of the hypogastric and perineal region represents an exceptionally rare and surgically complex clinical entity, arising predominantly as a consequence of prolonged diagnostic delay in populations with limited access to specialized medical care. The present case demonstrates that wide local excision with bilateral cutaneous rotation-advancement flap reconstruction is a technically feasible and oncologically sound primary approach even for tumors of considerable anatomical extent, achieving adequate wound coverage and satisfactory short-term postoperative outcomes in a resource-limited institutional setting.

From a prognostic standpoint, the pushing-type histological invasion pattern and the absence of lymphovascular or perineural involvement identified on biopsy represent relatively favorable features within an otherwise high-risk clinical context (AJCC Stage III, T4b N0 M0). Nevertheless, the elevated risk of local recurrence and regional metastasis inherent to this stage mandates strict multidisciplinary follow-up, with adjuvant radiotherapy and oncological reassessment at regular intervals over a minimum of two years.

Beyond its surgical relevance, this case underscores a critical public health gap: the absence of structured dermatological screening programs for high-risk rural populations — particularly elderly male agricultural workers with sustained ultraviolet exposure — in regions of western Mexico where access to early oncological diagnosis remains insufficient. Strengthening primary care networks and implementing targeted skin cancer awareness campaigns in these communities represent actionable steps toward preventing future presentations of this magnitude, beyond its surgical dimensions, the present case is relevant to the indexed literature for four specific reasons. First, the abdominoperineal topography with satellite lesions on the pelvic limbs represents a distribution not previously described in the giant cSCC literature to our knowledge, filling a genuine gap in published case documentation. Second, the case originates from western Mexico — a geographic and socioeconomic context systematically absent from the international cSCC literature, which is dominated by reports from Europe, North America, and East Asia. Third, as the incidence of cutaneous SCC continues to increase steadily and represents a significant public health problem, timely surveillance, temporary diagnosis, and immediate treatment are essential to minimize the risks of morbidity and

mortality, and our case provides a concrete illustration of the consequences when these conditions are absent serving as an evidence-based argument for policy change. Fourth, the satisfactory short-term postoperative outcome achieved in a resource-limited setting provides replicable surgical guidance for clinicians in similar contexts across Latin America.

In conclusion, clinicians managing patients in low-resource settings should maintain a high index of suspicion for advanced skin malignancies in patients with prolonged, neglected skin lesions, and should prioritize timely referral to multidisciplinary oncological teams. Early diagnosis remains the single most modifiable determinant of outcome in cutaneous squamous cell carcinoma.

Conflicts of interests

The authors declare no conflicts of interests.

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