Be afraid of a long-standing skin lesion

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A 91-year-old man presented to our emergency department for foul-smelling bleeding secretions and severe pain from a long-standing ulcerated skin lesion on his right frontotemporal area. This lesion had been present for over a year and originally measured about 2 cm. It had been managed at home with help from a nursing service but without any medical follow-up. Blood tests showed leukocytosis (WBC 16,800/mm^3), increased C-reactive protein (174 mg/L, n.v.<5), and normochromic normocytic anemia (Hb 8.8 g/dL, MCV 94.7 fL, MCH 31 pg). The patient was admitted to the geriatrics department, and an empirical broad-spectrum antibiotic therapy with piperacillin/tazobactam (4.5 g q8h IV) and daptomycin (500 mg q48h IV due to severe CKD) was started. A CT scan of the brain revealed complete obliteration of the diploic-tecal structures across the entire frontal squama on both sides of the skull (Figure 1 A,B,D), with infiltration of the right temporal muscle. The expansive lesion extended into the intracranial site, only partially delimited by the dura mater, with coexisting right frontobasal perilesional edema extending up to the anterior convexity, which exerted significant compressive pressure on the frontal horn of the lateral ventricle with a left-right shift of the midline by approximately 3 mm (Figure 1C). In the absence of surgical options and with persistent bleeding and severe pain, palliative sedation therapy was started. The patient died after 6 days of recovery.

Question

Based on the patient's medical history, the location of the lesion, and the brain CT scan, which is the correct diagnosis?

1. Pyoderma gangrenosum
2. Basal cell carcinoma
3. Keratoacanthoma
4. Cutaneous squamous cell carcinoma

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Key words: cutaneous squamous cell carcinoma; skin cancer; imaging; management; skin lesion.

Contributions: all the authors equally contributed to the work and approved the final version of the manuscript.

Conflicts of interest: the authors have no conflict of interest to declare.

Ethics approval and consent to participate: as this was a descriptive case report and data was collected without patient identifiers, ethics approval was not required under our hospital's Institutional Review Board guidelines.

Informed consent: the patient provided consent for access to medical records at the time of admission.

Availability of data and materials: all data underlying the findings are fully available upon reasonable request to the corresponding author.

Received: 25 March 2025.
Accepted: 2 April 2025.
Early view: 12 May 2025.

Licensee PAGEPress, Italy
Emergency Care Journal 2025; 21:13846
doi:10.4081/ecj.2025.13846

Answer

The correct answer is cutaneous squamous cell carcinoma (cSCC). cSCC accounts for 20% of all skin cancers, and its incidence is progressively increasing due to the rise in average life expectancy.[1] This malignant tumor originates from keratinocytes and typically develops in areas of the body chronically exposed to the sun, particularly in individuals with fair skin types, frequently evolving from precursor lesions such as actinic keratoses.[2,3] cSCC typically presents as a red, scaly plaque or nodule, often accompanied by crusting, ulceration, or occasional bleeding.[4] A biopsy is essential for confirming the diagnosis.[5] Treatment is generally

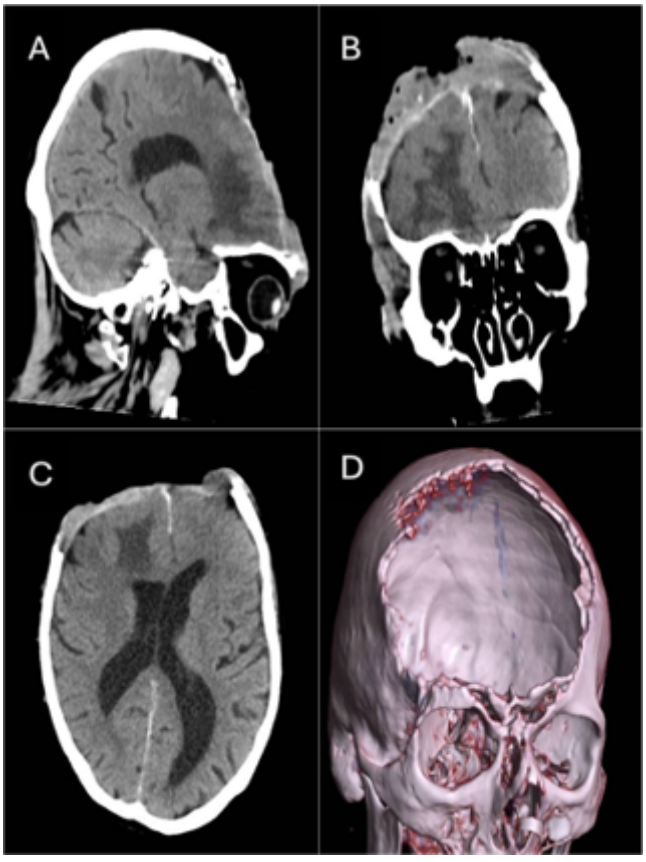

Figure 1. CT scan of the brain.

based on locally destructive techniques, such as surgical excision. Chemotherapy is reserved for patients with metastatic or locally advanced disease.[6] It is crucial to follow up closely after treatment due to the high risk of metastasis.[3] In this case the patient had a previous histological diagnosis of cSCC two years earlier, which was surgically removed. However, the lesion recurred the following year, measuring 2 cm. Due to the patient's age and comorbidities, no further surgery was undertaken.

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