An Atypical Presentation of Giant Cutaneous Squamous Cell Carcinoma of the Nose Diagnostic and Treatment Challenges

Tracy Cherubin, MS; Sachin Pawar, MD; Joseph Zenga, MD; Julia Kasprzak, MD

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INTRODUCTION/BACKGROUND

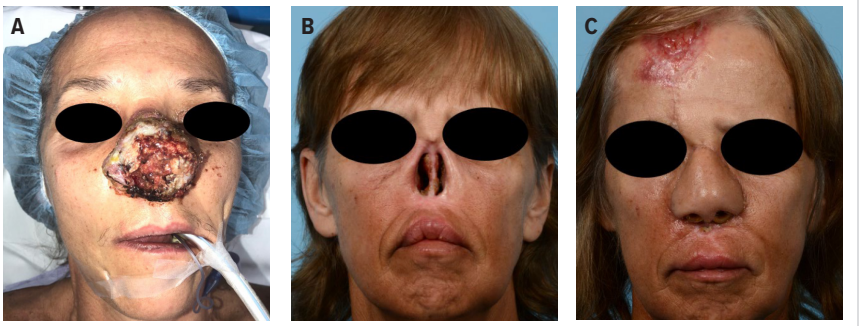
This is a case of a very atypical presentation of cutaneous squamous cell carcinoma (cSCC) of the nose that required multiple biopsies to confirm the diagnosis. Cases of locally advanced cSCC in cosmetically sensitive areas require multidisciplinary collaboration for best patient care outcomes.

CASE PRESENTATION

History: A 58-year-old woman presented with a rapidly growing, painful 5 cm plaque on her nasal tip present for approximately 2 months. It started after she spent time swimming and camping along the Mississippi River.

Work-up: Initial 4 mm punch biopsies showed an atypical squamous proliferation suspicious for cSCC but could not rule out underlying fungal infection. Deep fungal infection was high on the differential diagnosis given the atypical clinical presentation, rapid growth, and recent camping trip to an area endemic for blastomycosis. The case was presented at the multidisciplinary tumor conference. The decision was made to perform a deeper incisional biopsy to secure diagnosis and rule out deep fungal infection, since a deep fungal infection would significantly alter the treatment course. Incisional biopsy showed no fungal elements and confirmed the diagnosis of cystic, well differentiated cSCC. Computed tomography of the neck showed no cervical lymphadenopathy. Tissue fungal cultures were also negative.

Figure. Images of Patient Depicting A) Growth of Tumor 1 Month After Presentation; B) Healing After Total Rhinectomy and Radiation Therapy; C) Result of Complex Nasal Reconstruction



Treatment Course: Approximately 1 month after presentation, the plaque had grown to approximately 10 cm, and the patient underwent total rhinectomy with the head and neck surgery team. Final pathology showed well-differentiated squamous cell carcinoma with large caliber perineural invasion (PNI) >0.1 mm and invasion of the cartilage. She underwent postoperative radiation therapy to prevent local and regional recurrence. Months after conclusion of radiation treatment, she underwent neck dissection and complex reconstruction with head and neck and facial plastics teams. This involved rib cartilage and bone grafting, a free flap for reconstruction of nasal lining, transposition and paramedian forehead flaps. (See Figure.)

DISCUSSION

It is important to secure the diagnosis in atypical presentations of cSCC and to rule out deep fungal infection before undertaking aggressive surgical resection.[1] Postoperative radiation therapy is indicated in patients with large caliber PNI and recommended within 5 weeks of surgery.[2] Although nasal prosthetics are an option for patients who have had total rhinectomy, daily placement is cumbersome. Some patients may be candidates for complex total nasal reconstruction, which requires special expertise in microsurgery and advanced facial reconstructive techniques.[3]

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Author Affiliations: Department of Otolaryngology, Medical College of Wisconsin (MCW), Milwaukee, Wisconsin (Pawar, Zenga); Department of Dermatology, MCW, Milwaukee, Wis (Cherubin, Kasprzak).

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