Unusual Presentations of Sinonasal Undifferentiated Carcinoma

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ABSTRACT

INTRODUCTION

SINU09 undifferentiated carcinoma (SNUC) was first described by Frierson in 1986 as an aggressive and rare malignancy of the nasal cavity or paranasal sinuses with a very poor prognosis (1). It is known for locoregional recurrence and distant metastases to the lung and bone. Patients are more likely to be male with a median age of approximately 50 years of age (2). Presenting symptoms vary from nasal obstruction, epistaxis, headaches, facial pain, and visual changes. SNUC is thought to originate from the nasal ectoderm, or Schneiderian epithelium of the paranasal sinuses. It is considered part of the group of neuroendocrine sinonasal malignancies. Although, intracranial extension is seen in SNUC it is most commonly found in the anterior fossa (3). However, we report for the first time a case of SNUC extending into the sella and another case of SNUC extending into the clivus.

Patient 1

Patient 1 was a previously healthy 63 year old male who presented with insatiable thirst for several months and right-sided frontal headaches. He went to his primary care physician who found that he had unexplained hypotension. He was then hospitalized and underwent a general workup that included a computed tomography of the head which showed a sellar mass. A MRI demonstrated an enhancing mass measuring 14mm that filled the sella turcica and extended into the right cavernous sinus. At the same time the patient was found to have panhypopituitarism. There was no history of nasal obstruction, facial pain, rhinorrhea or epistaxis. His past medical history was significant for diabetes mellitus type II and erectile dysfunction. His visual fields and cranial nerves were intact. Shortly thereafter the patient underwent tumor resection through an endoscopic transphenoidal approach. Final post operative pathology indicated SNUC within the nasal polyps and the sellar mass. Tissue specimens revealed extensive infiltration by an undifferentiated carcinoma. He was treated with postoperative chemoregulation and radiation. He died of his disease four months later.

Patient 2

Patient 2 was a 49 year old male who presented with a right-sided neck mass to his primary care physician. The patient was then referred to an otolaryngologist who did a fine needle aspiration of the level II mass. This was identified as an undifferentiated carcinoma. Imaging studies were done to workup the mass and demonstrated a lesion in the patient’s sphenoid sinus that extended into the clivus. He had no previous history of nasal obstruction, facial pain, rhinorrhea, epistaxis or headaches. His past medical history was only significant for hypertension.

He was then taken for surgery and underwent a transphenoidal endoscopic resection of the sino and clival lesions. Intraoperative pathology demonstrated SNUC. He underwent postoperative chemotherapy and radiation therapy. He was free of disease for one year before he developed reoccurrence in the clival region and underwent another resection. He succumbed to his disease process six months later.

CONCLUSION

This presentation has highlighted the importance in recognizing SNUC outside the sinuses. It can present as brain lesions, pituitary lesions, clival lesions. It is our hope that the earlier this lesion is identified the better the outcomes.

REFERENCES