Case Report of Periocular Merkel Cell Carcinoma Treated with Primary Concomitant Chemotherapy and Radiation, and Review of the Literature Regarding Its Use.

Prosser JD¹, Bhatt N¹, Coleman T², and Jackson L¹.
Departments of Otolaryngology¹ and Medicine², Medical College of Georgia, Augusta Georgia

Introduction:
Merkel Cell Carcinoma (MCC) is a rare, aggressive cutaneous malignancy of neuroendocrine origin. Initially described by Toker¹ in 1972, it is thought to arise from cutaneous mechanoreceptors. Nearly half of MCCs occur in the head and neck, making it the most common site of occurrence. Due to its rare nature, prospective randomized controlled trials comparing treatment options are lacking.

Case Presentation:
A 74 y/o white female presented to our multidisciplinary Head and Neck Tumor Board with a one month history of a rapidly expanding left infraorbital lesion. She initially presented to her PCP who performed an I and D which yielded no purulent fluid. She was placed on antibiotics but the lesion continued to enlarge. She presented to the emergency room after the lesion expanded to the point where her vision was obscured. Physical exam showed a 7.2 x 5 cm mass on the left malar eminence extending from the medial canthus to 3 cm lateral to the lateral canthus (Fig 1). The lesion was lobulated, firm and mobile. A CT scan demonstrated a soft tissue mass with evidence of central necrosis suggestive of malignancy (Fig 2). A biopsy was obtained which revealed Merkel cell carcinoma (Fig 3). PET scan was negative for any nodal or distant metastasis. Although surgical excision was thought to provide the greatest opportunity for cure, she was treated initially with concomitant chemo/RT in an attempt to allow preservation of her eye. Treatment was initiated with carboplatin weekly at an AUC of 2 with concomitant radiation. She underwent a total of 5 cycles of chemotherapy and 70Gy of radiation therapy with excellent clinical response (Fig 4 and 5). Although post-treatment PET scan was suggestive of residual disease (SUV 3.4) at the left medial canthus, biopsies performed in the operating room were negative for malignancy. She is currently asymptomatic with no evidence of recurrence one year post treatment (Fig 4/5).

Discussion:
Currently there is no consensus on the optimal management of patients with MCC. Due to its rare nature, large prospective trials are lacking. Most literature supports the use of primary surgical excision with adequate margins often with post-operative RT. Due to its similarity to small cell carcinoma of the lung, many have studied synchronous chemoradiotherapy for non-surgical treatment, as is common practice for small cell carcinoma. Poulsen et al³ prospectively evaluated carboplatin/etoposide and synchronous RT at 50 Gy and found good response rates with local/regional control exceeding 75% and overall 3 yr survival in 76%. 28% of these patients received synchronous chemo/RT as primary definitive treatment. Further weekly carboplatin at an AUC of 2 reduced side effects during synchronous chemo/RT. Given the lack of large prospective randomized trials of non-operative treatment of MCC, case reports like this one are important additions to the literature and suggest additional treatment options in patients who are poor surgical candidates or do not desire surgical treatment.

References: