MS-12. TEMOZOLOMIDE-BASED THERAPY FOR THE MANAGEMENT OF PROGRESSIVE PITUITARY CARCINOMA
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BACKGROUND: Pituitary carcinomas (PC) are very uncommon, accounting for only 0.1% of all pituitary tumors and representing a treatment challenge. Diagnosis is based on presence of intra- and/or extracranial metastases. PC is resistant to current treatment regimens, with a median overall survival of only 31 months. There is no standard treatment for PC, but maximal safe resection and radiation are performed when possible.

Temozolomide (TEM)-based regimens are being used in progressive PC, but its effectiveness and the schedule/duration of treatment have not been established. The aim of this study is to report our experience with TEM in patients with progressive PC.

METHODS: Three adult patients with progressive PC who were treated with TEM at MDACC between 01/2010-06/2014 were identified. Clinical and radiographic data were extracted from medical records.

RESULTS: All three cases had prior history of pituitary macroadenoma. Clinical presentation of PC included visual field deficits, headaches and/or Cushing syndrome. Pathology revealed a mean Ki67 index of 11.5% (0.4-24.2%) with positive p53 staining in one case. Cavernous sinus invasion was common and metastases involved lymph nodes, liver, bone and leptomeninges. Case 1 received a combined regimen consisting of capecitabine and TEM (CAPTEM). Case 2 was treated with standard-dose TEM, CAPTEM, and chemoradiation with TEM followed by TEM. Case 3 with dissemination to the bone and leptomeninges was initially treated with standard-dose TEM, followed by dose-dense TEM at progression. In the two patients who received chemoradiation with TEM for extracranial disease, the progression-free survival (PFS) was 15 and 17 months, whereas the PFS after TEM-only was 13 months. The median overall survival was 41 months, with all the patients still alive.

CONCLUSION: TEM-based therapy seems to be an appropriate initial treatment for PC, prolonging the PFS and leading to tumor-stabilization.