Use of temozolomide in aggressive pituitary tumors: case report.

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OBJECTIVE: The management of aggressive pituitary macroadenomas represents a challenge to neurosurgeons. These tumors are very difficult to treat, owing mainly to their invasive nature, thus resulting in incomplete resections and propensity for recurrence. Multiple surgical procedures (transsphenoidal, transcranial, or a combination of both) are the first line management, followed by radiotherapy and chemotherapy. CLINICAL PRESENTATION: Three cases of patients with pituitary adenomas who underwent temozolomide treatment are presented. The first 2 patients had corticotroph macroadenoma of the Crooke's cell variant. Deterioration occurred in both cases despite multiple surgeries and adjuvant therapy. The third patient had a glioblastoma multiforme with an incidental pituitary tumor. INTERVENTION: All 3 patients had temozolomide administered orally on the first 5 days of a 28-day cycle for 12 cycles. Magnetic resonance imaging, endocrinological, and clinical follow-up were performed at monthly intervals. CONCLUSION: The marked improvement in clinical state of the first 2 patients accompanied by radiological evidence of tumor shrinkage in all patients demonstrates the potential use of temozolomide in treating aggressive pituitary macroadenomas. The usefulness of temozolomide in aggressive pituitary adenomas should be studied in larger trials.

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