Relief of Severe Refractory Headache Related to Glioblastoma Multiforme in a Patient with No Migraine History by Means of Sumatriptan as well as Eventual Cessation of High-Dose Steroids (TH349-C)

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Objectives
• Recognize the potential role for sumatriptan in treatment of glioblastoma-induced headache.
• Explain the role of steroids in glioblastoma including the role of (essentially) stopping steroids at the end of life.

Background: There has been recent national focus on the symptoms of glioblastoma multiforme, largely as a result of a young woman (Brittany Maynard) writing online about how she moved to Oregon after her diagnosis so that she could end her own life. She and others have described glioblastoma as resulting in a “horrible” death. Much of the focus has been on potentially severe and refractory headaches. Sumatriptan is a serotonergic (5-HT1D and 5-HT1B) agonist which is effective in treatment of migraines, most likely through vasoconstriction of certain cerebral arteries, decreased migraine-related intracerebral vascular inflammation, and decreased activity of the trigeminal nerve. A PubMed search did not reveal any cases of sumatriptan being used for glioblastoma-related headache, although two case reports have described benefits in treatment of headache from pituitary macroadenomas. In addition, a PubMed search failed to reveal a case where dexamethasone was intentionally minimized at the end of life.

Case Description: A 57 year old man on hospice with glioblastoma had severe headaches much of every day despite nortriptyline, pregabalin, acetaminophen 1000 TID, dexamethasone 24mg/day, and approximately 100mg of oral morphine per day (he refused additional morphine because of drowsiness). Sumatriptan was initiated, which gave him complete consistent and complete relief from headaches. Morphine usage decreased by >70%, with improved mentation and less drowsiness. Nine days later, his function and mental status declined dramatically, so his dexamethasone was decreased to 1mg/day. He rapidly became comatose and died peacefully within two days.

Conclusion: This case directly relates to national concerns by describing two previously undescribed approaches to caring for a patient dying from glioblastoma multiforme. In this patient, sumatriptan appears to have dramatically reduced his suffering and improved his quality of life. In addition, minimizing dexamethasone at the end prevented a drawn-out painful dying process.