Patterns of End of Life Care in a Retrospective Cohort of Glioblastoma Patients

Authors: Lauryn Hemminger; David Korones, MD; Jennifer Serventi, PA-C; Susan Ladwig, MPH; Robert Holloway, MD, MPH; Nimish Mohile, MD, MS

Objective: Describe advanced care planning (ACP) and end of life (EOL) care in glioblastoma.

Background: National guidelines for terminal cancers recommend early advance directive (AD) documentation, hospice at EOL, and no chemotherapy within 14 days of death.

Methods: IRB-approved retrospective analysis of 117 deceased glioblastoma patients over 5 years. Records were reviewed to describe AD and treatment-limiting order (TLO) documentation (health care proxy (HCP), living will (LW), medical orders for life-sustaining treatment (MOLST), non-hospital DNR), PC consultation, hospice enrollment, last chemotherapy administration, and location of death.

Results: Median overall survival was 12.9 months. 36.8% (43/117) had a PC consult. ADs were documented for 52.1% (61/117) by the 3rd neuro-oncology visit (30 HCP, 8 LW, 22 MOLST, 1 DNR). 37.6% (44/117) spent >80% of their survival without an AD. 88.0% (103/117) had a TLO before death. 53.0% (61/117) spent >90% of their survival without a TLO. 59.8% (70/117) enrolled in hospice >7 days before death. 56.4% (66/117) died in a home setting. Patients who died in a home setting enrolled in hospice earlier than those who died in a healthcare facility (median 22 days before death vs 7.5 days, p=0.0002). 94.9% (111/117) had no chemotherapy in the last 14 days of life.

Conclusions: Most early ADs were limited to HCP alone and TLOs were completed late in disease course. Earlier hospice enrollment was associated with death in a home setting. Few patients had an outpatient PC consultation and additional studies are needed to determine if early PC improves ACP and EOL outcomes in glioblastoma.