

## 49. EARLY COMFORT CARE FOLLOWING OPERATIVE INTERVENTION FOR TRAUMATIC INJURY

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**Introduction:** Several studies have described the population of adult trauma patients who undergo withdrawal of life sustaining treatments (WLST); however, no study has looked specifically at trauma patients who undergo WLST following surgery.

**Methods:** A retrospective chart review was conducted of all trauma patients who underwent surgery at our level 2 trauma center between January 1 and December 31, 2017. Patients under 18 and those who died in the operating room were excluded. Demographics including age, sex, race, injury severity score, mechanism of injury and operative intervention were collected. We conducted descriptive and comparative studies (Mann-Whitney U test for continuous variables and Fisher's exact tests for categorical variables) with SAS Studio 3.7. Charts of all patients who died or who were discharged to hospice were analyzed to determine whether WLST occurred. Palliative care consults and advance directives were reviewed.

**Results:** Between January 1 and December 31, 2017, 3025 adult trauma patients received care and 1495 (49.4%) had operations. Of the operative patients, 30 (2.0%) patients underwent WLST, 15 (50.0%) of whom died in the hospital and 15 (50.0%) of whom were discharged to hospice. 14 (46.7%) were male and median age was 76.5 (range 19-95). Median Injury Severity Score (ISS) was 12 (range 1-36) and median age-adjusted Charlson Comorbidity Index (CCI) was 6 (range 0-12). 26 (86.7%) patients had a palliative care consult and 12 (40.0%) had prior advance directives. The most common mechanism of injury was ground level fall and the most common injuries were femur fractures and subdural hematomas. For all patients, median time from surgery to palliative care consult was 67 (range 16-213) hours, median time from palliative care consult to WLST was 46 (range 0-237) hours and median time from surgery to WLST was 120 (range 29-283) hours. Adjusting for age, white race and age-adjusted CCI, femur fracture patients had, on average, 8.8 more hours between presentation and surgery (95% CI 2.1-15.4, P=.01) and 39 fewer hours between surgery and WLST (95% CI -107-29, P=.26) than traumatic brain injury patients.

**Conclusion:** The short time between surgery and WLST in this cohort of patients may demonstrate that surgery was not aligned with patients' goals of care. The length of time between presentation and surgery for femur fracture patients represents a missed opportunity for primary palliative care. A patient-centered approach which includes surgeon-driven palliative care discussions may help avoid non-beneficial surgery in the last few days of life.

**Table 1. Femur fracture versus traumatic brain injury (TBI)**

	Femur Fracture n=12	TBI n=10	p-value
Median age (IQR)	83 (79 – 90)	68 (48 – 71)	<.01
White race, n (%)	12 (100)	7 (70.0)	.08
Median age-adjusted CCI (IQR)	7 (6 – 9)	4 (2 – 4)	<.01
Median time to OR, hrs (IQR)	17 (9 – 21)	5 (3 – 8)	<.01
Median time OR to comfort care, hrs (IQR)	98 (67 – 143)	159 (95 – 239)	.11

**Abbreviations:** CCI, Charlson Comorbidity Index; hrs, hours; IQR, interquartile range; OR, operating room