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Traumatic Subdural Hematoma: An Update on Morbidity

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Background: Published data on acute traumatic subdural hematoma in adults typically describe small cohorts of patients hospitalized in the 1970s and 1980s, with limited information on functional outcomes and reported in-hospital mortality rates ranging from 21% to 66%. Our goal was to evaluate morbidity in a larger and more recent cohort.

Methods: Eligible patients were older than 16 years of age with acute traumatic subdural hematoma evaluated in a Level I trauma center between January 1, 2005, and December 31, 2008. Standardized data were prospectively collected on demographics, past medical history, injury and surgery characteristics, length of stay, functional outcomes at time of discharge, and mortality.

Results: The 2,072 patients included in the study were, on average, 52.6 years of age, with the majority (70%) male, an average Injury Severity Score (ISS) of 27.4, and a Glasgow Coma Scale (GCS) > 12 (57%). Average length of stay was 10 days (range 1–142 days). Patients undergoing evacuation of subdural hematoma (N = 315) did not differ significantly in gender or ISS from those who did not have surgery. Significantly more evacuated patients than non-evacuated patients had a GCS < 6 (38% vs 29%), an Abbreviated Injury Scale > 4 for Region 1 (95% vs 38%), a length of stay > 21 days (23% vs 11%), and discharge to a facility other than home (64% vs 35%). Mortality did not differ significantly between groups: 13% in the evacuated group vs 12% in the non-evacuated group.

Conclusion: This cohort, which includes patients with polytrauma, shows a markedly lower mortality rate than previously reported in the literature.