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Glasgow Coma Scores, early opioids, and posttraumatic stress disorder among combat amputees.

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Abstract:
A recent study found that combat amputees had a reduced prevalence of posttraumatic stress disorder (PTSD) compared with nonamputees with serious extremity injuries. We hypothesized that an extended period of impaired consciousness or early treatment with morphine could prevent consolidation of traumatic memory and the development of PTSD. To examine this hypothesis, we retrospectively reviewed 258 combat casualty records from the Iraq or Afghanistan conflicts from 2001-2008 in the Expeditionary Medical Encounter Database, including medications and Glasgow Coma Scale (GCS) scores recorded at in-theater facilities within hours of the index injury. All patients sustained amputations from injuries. Psychological diagnoses were extracted from medical records for 24 months postinjury. None of 20 patients (0%) with GCS scores of 12 or lower had PTSD compared to 20% of patients with GCS scores of 12 or greater who did have PTSD. For patients with traumatic brain injury, those treated with intravenous morphine within hours of injury had a significantly lower prevalence of PTSD (6.3%) and mood disorders (15.6%) compared to patients treated with fentanyl only (prevalence of PTSD = 41.2%, prevalence of mood disorder = 47.1%). GCS scores and morphine and fentanyl treatments were not significantly associated with adjustment, anxiety, or substance abuse disorders.