

## Near-Hanging Injuries in an Urban Emergency Department

Stuart P. Swadron, MD  
Kori Sauser, MS  
Aleya Hyderi  
Sean O. Henderson, MD

Keck School of Medicine of the University of Southern California

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**Objectives:** Hanging is the second most common method of suicide in the United States. Few studies have examined the epidemiology of near-hanging cases presenting to an emergency department (ED).

**Methods:** A retrospective chart review was performed on patients presenting to an urban Level I trauma center between 1997 and 2007 with a diagnosis of near-hanging. Charts were abstracted for the following: gender, age, location of discovery, ligature, ligature marks, type of suspension, duration of hanging, cardiopulmonary resuscitation (CPR) at scene, cardiopulmonary arrest (CPA), Glasgow Coma Score (GCS) on arrival, endotracheal intubation, imaging and toxicology results, social history, injuries sustained, additional diagnoses and patient outcome. Descriptive statistics were used to summarize the data.

**Results:** Of 77 patients identified, 67 (87%) were male and 10 (13%) were female. The mean age was 33.9 years (range 10 to 86). Seventy-four (96%) cases were the result of a suicide attempt. The most common location of discovery was a jail cell (49%). The mean GCS on arrival was 10.4 (range 3 to 15). Endotracheal intubation was performed in the ED in 28 (36%). Hanging durations were not consistently available. Of 33 patients for whom a full chart review was performed, 29 patients (88%) survived to discharge. Three (10%) of these patients suffered CPA and one (3%) received CPR at the scene. Of six patients (18%) with a GCS of 3, two (33%) survived to discharge. Only three surviving patients (10%) suffered hypoxic brain injury. A single patient had a C-spine fracture and another developed pulmonary edema. Hanging durations of up to 10 minutes were recorded in the survivors.

**Conclusions:** We describe one of the largest series of near-hanging injuries presenting to an ED. Men far outnumbered women in cases of attempted suicide. The majority of patients survived, and several patients with CPA, CPR on scene, GCS scores of 3, and prolonged hanging times survived to discharge.