



Children and Televisions: Current Trends in TV Tip-over Related Injuries

Mallory Wampler, MS-3
Alan Tyroch, M.D.

BACKGROUND

There is a significant increase in avoidable childhood injuries caused by television sets that tip-over, resulting in significant morbidity and even mortality. While the type of television (flat screen vs. cathode ray tube) involved in these incidents is often undocumented, it is possible the increasing number of injuries could be due to the wider availability of lighter flat screen televisions. Modern day flat screen televisions were developed around 1996 and were often sold for about \$15,000 per set. With developments in technology and competition, more affordable flat screens have become the standard household television set starting around 2006. The increasing number of flat screen televisions in the home may lead to the placement of older, heavier television sets in less monitored areas of the home or on unstable pieces of furniture not meant as TV stands.

METHODS

After obtaining IRB approval, we conducted a retrospective chart review of the University Medical Center Trauma Registry of patients that were admitted for television tip-over related injuries from January 2002 to August 2013. Patient demographics, type of insurance, trauma activation level, GCS status on admission, hospital and ICU length of stay, morbidity and mortality outcomes were documented.

RESULTS

Thirty patients were identified, ranging from 1 to 7 years of age (mean age: 2.8). The highest number of injuries occurred in the 1-2 year old age range. Eighty percent of these patients were injured in their own home. Fifty-seven percent of patients were male.

In regards to ethnicity, 83% of patients were Hispanic, 7% were

Black and 7% were White. Sixty-four percent of these patients had Medicaid as their primary insurance. Total acute care charges and collections for the 30 patients were \$646,409 and \$107,197, respectively. Forty-seven percent of these children met Level I trauma activation status based on anatomic and/or physiologic criteria when they arrived at UMC. The mean GCS on arrival was 12 (range: 3-15). Eighty percent of the children sustained were traumatic brain injuries. The mean ISS score was 11.6 (range: 1-25). The mean hospital length of stay was 3.1 days (range: 1-16). A third of the children spent time in the ICU with a mean ICU length of stay of 2.9 days. Unfortunately, the mortality was 13%, with all four deaths attributed to devastating traumatic brain injury.

CONCLUSION

Television tip-over injuries are a growing trend. Young children, especially 1-4 years old, are most susceptible to injury. The majority of injuries are traumatic brain injuries, which lead to increased morbidity and mortality. This study demonstrates the importance of prevention initiatives including: safety presentations to parents or new mothers in the community, counseling at pediatric wellness visits, as well as encouraging the industry to provide television anchoring or mounting devices at the point of sale.

Mallory Wampler, MS-3, Texas Tech University Health Sciences Center - Paul L. Foster School of Medicine.

Alan H. Tyroch, M.D., Professor and Chair of the Department of Surgery at Texas Tech University Health Sciences Center and Trauma Medical Director at University Medical Center, El Paso, Texas.

Age in Years	1	2	3	4	5	6	7
# of Children	8	7	4	6	4	0	1

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
# of Children	2	1	3	2	1	1	2	5	2	4	7
Incidence	1.31%	0.53%	1.62%	0.55%	0.54%	0.45%	0.88%	2.49%	1.31%	1.8%	2.47%