

Title: UNTANGLING HAIR ACCESSORY INJURIES: PEDIATRIC EMERGENCY DEPARTMENT ENCOUNTERS WITH HAIR ACCESSORY ASSOCIATED INJURIES (2005-2024)

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Background:

Hair accessories are widely used by children but have potential to cause harm. To date, there have been no prior reports of the types of injuries in this age group. This study characterizes pediatric hair accessory-related injuries in the United States using a national database.

Methods:

The National Electronic Injury Surveillance System (NEISS) is a stratified probability sample of U.S. hospitals with emergency departments, including a dedicated pediatric stratum. Reported product-associated cases are used to generate weighted national estimates. We queried the NEISS (2005-2024) for patients aged ≤ 17 years with injuries attributed to hair accessories (code 1682). Exclusion criteria included patients ≥ 18 years, unrelated product codes, and incomplete records.

Results:

From 2005 to 2024, NEISS estimated 38,568 hair accessory injuries nationwide based on 1901 reported cases (656 beads, 542 bobby pins, 212 barrettes, 162 clips, 161 hair ties). Foreign body ingestion or impaction accounted for 41.2% (n = 785). Other diagnoses included lacerations (n = 419), contusions/abrasions (n = 348), punctures (n = 81), hemorrhage (n = 22), and dermatitis (n = 10). Most patients were treated and released (n = 1845). Forty-one left without being seen or against medical advice, nine required admission, six patients required transfer. Injuries were more common in females (76%). The most frequently affected sites were the face (32%), ear (31%), and head in (21%).

Conclusions (or Preliminary Conclusions):

Hair accessories represent a preventable source of pediatric injury, most often through foreign body impaction/ingestion. While most patients were safely discharged, a small proportion experienced severe injuries requiring admission or transfer. These findings underscore the need for improved product safety measures and increased public awareness regarding the potential risks of hair accessories in children.