CHILD HEALTH PATIENT SAFETY ORGANIZATION



Serious Safety Event Action Alert
July 2014

A Patient Experienced SERIOUS SAFETY EVENT

Take Action to Reduce Risk of Similar Harm

Event: Fingertip Amputation

Target Audiences:

Nursing, Medical and Clinical Leaders, Quality Improvement, Patient Safety, Legal, Risk Management, Clinical Educators, Cause Analysis Staff and Organizational Leaders

Resultant Harm to the Patient:

A neonate's fingertip was amputated with scissors while removing tape around malfunctioning peripheral arterial line.

Actions to Mitigate Risk of Similar Harm at Your Hospital:

 Review the attached 2004 Pennsylvania Patient Safety Advisory ("Snip-It Safety"), which addresses pediatric scissor injuries and provides riskreduction strategies.

Has a patient experienced an event at your organization that could happen in another hospital?

- Child Health PSO members submit event details into the <u>Child Health PSO portal</u>.
- Contact Child Health PSO Staff to share risks, issues to assess, and mitigation strategies with member hospitals.
- Forty-one children's hospitals are actively engaged with Child Health PSO. We currently are enrolling new members.

What can I do with this Alert?

- Forward this Alert to the recommended target audience for evaluation.
- Include in your Daily Safety Brief.
- Create loop-closing process for evaluating risks and strategies implemented to decrease risk of repeat harm.
- Let Child Health PSO know what is working and what additional information you need.

Leverage your PSO
membership: Learn from
each other to reduce patient
harm and Serious Safety
Events

Contact Us

psosupport@childpso.org

This Alert is approved for general distribution to improve pediatric safety and reduce patient harm. This Alert meets the standards of non-identification in accordance with 3.212 of the Patient Safety Quality Improvement Act (PSQIA) and is a permissible disclosure by Child Health PSO.

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Patient Safety Advisory

Produced by ECRI & ISMP under contract to the Pennsylvania Patient Safety Authority

Snip-It Safety

Pennsylvania healthcare facilities have submitted several reports to PA-PSRS involving patients injured by scissors during the provision of care. Scissors-related injuries reported to PA-PSRS range from superficial nicks to lacerations requiring closure with adhesive strips or sutures, and even amputation of a finger tip.

The clinical literature on scissors injuries focuses on: 1) occupational injuries, 2) first aid equipment, 3) patient self-injury, and 4) child safety. Very little information is available concerning scissors-related injuries to patients during care. One article describes reconstructive surgery related to a subtotal finger amputation of a neonate while the umbilical cord was being cut upon delivery. A search of the clinical-legal literature revealed a case in which a physician cut a neonate's finger tip off with bandage scissors during uterine entry for a Cesarean section delivery.

Information from PA-PSRS reports is presented below in order to reveal possible causative factors and risk reduction strategies.

Age

The reports reveal a dichotomy concerning the ages of patients sustaining scissors injuries. Forty-six percent (46%) of these injuries occurred in children ranging from 2 days old to 17 months. The remaining 54% of the patients were aged 59 to 76 years old. Therefore, patients at the extremes of age were involved in scissors injuries caused by healthcare workers. This may be associated with the patient's inability to control the body part involved in the injury or to provide meaningful sensory feedback.

Circumstances

An analysis of the circumstances involved in these reports indicates the following patterns. Difficulty removing adhesive tape (during IV or dressing changes) was documented in 38% of the reports, while removing patient identification bands was involved in 31% of the reports. Other factors cited in these reports included: bandage removal; obstructed view of the area in which scissors were used; and use of scissors when other equipment may have been safer (such as using scissors to remove excessive hair from an area).

Type of Scissors

Bandage scissors were documented in only 15% of the reports. Suture scissors were used to cut stockinette from a forearm in one case. The types of scissors were unspecified in the other reports.

Location of Injury

Fingers, arms, and hands were injured in 54% of the cases. Legs, calves, and feet were injured in 23% of the reports. The remaining reports did not specify the location of the injury.

Risk Reduction Tips

What can be learned from these occurrences? The following tips may be helpful in reducing scissors injuries to patients.

Avoidance

- Not using scissors to remove dressing material, tape, or securement devices at or near an infusion insertion site: a suggestion of the Infusion Nurses Society.³
- Not using scissors when another, non-sharp approach can be used.
- Minimizing the use of scissors in the very young and very old.
- Using a shaver/clipper to remove body hair, rather than scissors.
- Using tape that secures, yet is readily removable, thus reducing the need to use scissors.
- Considering the use of Montomery straps when bulky, frequently changed dressings are required.

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Snip-It Safety (Continued)

A Different Look at Scissors Safety: Infection Control

For decades, personal bandage scissors have been part of the basic and necessary equipment carried by many healthcare providers. From patient to patient, these scissors have traditionally been used in the routine provision of care, such as during dressing changes. In this age of increasing bacterial resistance, however, healthcare workers may wish to re-examine the use of such equipment in light of studies that indicate a risk of infection when using their scissors for a multitude of purposes.

One study involving 100 healthcare workers' scissors revealed that bacteria were cultured from 59% of the scissors swabbed.¹ In addition, 16% of the scissors continued to be contaminated even after cleaning. Another study involved a sample of 232 healthcare workers' scissors.² Bacteria were colonized on over 78% of these scissors. The study also revealed that cleaning of scissors did not occur frequently. Adequate disinfection of 89% of the scissors was accomplished, however, by wiping them with an alcohol swab. A third study, however, indicated that wiping each scissor blade 20 times and the hinge 10 times with a 70% isopropyl alcohol swab effectively disinfected only 80% of the scissors cultured.³ Even with careful disinfection practices, some personal bandage scissors may continue to harbor microorganisms.

One hospital is attempting to reduce the transmision of microorganisms from non-dedicated healthcare equipment by implementing a pilot project on one nursing unit.⁴ Each patient, regardless of whether he/she is infected with a resistant organis, is provided his/her own equipment such as blood pressure cuff, bandage scissors and digital thermometer. The patient's bedside supply box includes everything needed to care for the patient, and that equipment is used only for that patient. Infections will be monitored to determine whether there is a decrease in the transmission of microorganisms from one patient to another. Using sterile-packaged bandage scissors or disposable, one-time use scissors may also help control infection.

Healthcare workers' scissors may potentially transmit microorganisms, including antibiotic-resistant bacteria, from one patient to another. Rethinking how equipment is used in providing patient care may help to reduce infection transmission.

Notes

- 1. Kelly J, Trundle C. Scissors: Are they an infection control risk? Prof Nurse. 2000 Nov; 16(2):876.
- 2. Embil JM, Zhanel GG, Plourde PJ, et al. Scissors: A potential source of nosocomial infection. Infect Control Hosp Epidemiol. 2002 Mar; 23(3):147-51.
- 3. Oldman P. An unkind cut? Nursing Times. 1987; 83(48);71-4.
- 4. Ringler RD. Infection control nurses must think outside the box. *Nursing Spectrum*. 2004 Mar 8 [online]. [cited 2004 Oct 20] Available from Internet: http://www.nursingspectrum.com/MagazineArticles/article.cfm?AID-11542.

Assessment

 Confirming the location of the body part and all digits/appendages in the area prior to cutting.

The Blunt Approach

- Using blunt-edged scissors.
- Applying acetone-free adhesive tape remover or baby oil⁴ to address difficulties in removing tape, rather than cutting the tape.

Visibility

- Keeping one's eyes on the task at hand; avoiding distractions that take eyes away during scissors positioning and the cutting process.
- Cutting only what can be seen. If a bandage is thick, cutting one layer at a time, after removal of tape.
- Using clear/transparent dressings so that the area can be fully visualized.

• Using a minimum amount of tape necessary to secure a dressing or arm board.

Control

 Having a second person secure the body part and digits prior to cutting when the patient is unable to keep still.

Positionina

- Placing scissors blades so as to cut away from the body/extremity surface.
- With the blunt side of lower scissors blade touching the body surface, positioning the cutting surfaces of the blades at 90° to the body surface, rather than parallel.
- Cutting from the larger, proximal portion of an extremity toward the direction of the distal, narrower portion.
- Lifting the ID band away from the extremity before using the scissors to cut the band.

Snip-It Safety (Continued)

 With thick bandages, using a blunt instrument to lift a portion of the bandage/tape away from the body before introducing bandage scissors.

Notes

- 1. Lees VC. Successful revascularization of subtotal amputation of a digit in a neonate. *J Hand Surg [Am]* 1999 Jul;24A(4):812-5.
- 2. Hurst and Hurst v. Dougherty, 800 S.W.2d 183 (Ct. App. Tenn. 1990).
- 3. Infusion Nurses Society. 2000 infusion nursing standards of practice. *J Intraven Nurs*. 2000 Nov/Dec;23(6S):S1-88.
- 4. Goldberg K, ed. *Nursing procedures*. 2nd edition. Springhouse (PA): Springhouse Corporation;1996:194.



The Patient Safety Authority is an independent state agency created by Act 13 of 2002, the Medical Care Availability and Reduction of Error ("Mcare") Act. Consistent with Act 13, ECRI, as contractor for the PA-PSRS program, is issuing this newsletter to advise medical facilities of immediate changes that can be instituted to reduce serious events and incidents. For more information about the PA-PSRS program or the Patient Safety Authority, see the Authority's website at www.psa.state.pa.us.



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The Institute for Safe Medication Practices (ISMP) is an independent, nonprofit organization dedicated solely to medication error prevention and safe medication use. ISMP provides recommendations for the safe use of medications to the healthcare community including healthcare professionals, government agencies, accrediting organizations, and consumers. ISMP's efforts are built on a non-punitive approach and systems-based solutions.