

ED NURSING™

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Special Report:

Overdose Patients in the ED

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Don't use outdated treatments — Follow current overdose guidelines

No routine activated charcoal, gastric lavage, or whole bowel irrigation

When an overdose patient comes to your ED, do you automatically provide some type of gastric decontamination? If so, you're not following current guidelines for those patients.

A surprising number of EDs have not changed their care to reflect these new recommendations, reports **Linda Courtemanche, RN, CSPI**, director of the New Hampshire Poison Information Center in Lebanon.

Current guidelines clearly state that gastric lavage, activated charcoal, cathartics, and whole bowel irrigation should not be used routinely in the management of poisoned patients, yet this is still being done in many EDs, says **Diana Meyer, RN, MSN, CCNS, CCRN, CEN**, a clinical nurse specialist for emergency services at Presbyterian Intercommunity Hospital in Whittier, CA. "These new approaches are still an area of controversy in the ED."

In 1997, the Harrisburg, PA-based American Academy of Clinical Toxicology (AACT) and the Birmingham, England-based European Association of Poisons Centres and Clinical Toxicologists (EAPCCT) published five position statements on gastric decontamination, including whole bowel irrigation, gastric lavage, cathartics, ipecac, and activated charcoal.¹

Charcoal no longer needed?

Review the position statements to see if your practice is up to date, urges Courtemanche. "These guidelines have a tremendous impact on ED management. In many cases, charcoal or lavage is no longer indicated, just symptomatic and supportive care."

Still, many ED nurses and physicians are unaware about the new approaches recommended by the guidelines, reports Courtemanche. In many EDs, gastric lavage and activated charcoal are still routinely administered to overdose patients she says. **(See GI decontamination clinical guideline that includes the practices recommended by the guidelines, inserted in this issue.)**

**Special Report:
Overdose Patients
in the ED**

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EXECUTIVE SUMMARY

Position statements for gastric decontamination were published by the Harrisburg, PA-based American Academy of Clinical Toxicology and the Birmingham, England-based European Association of Poisons Centres and Clinical Toxicologists in 1997, but many EDs have still not incorporated those recommended practices into their protocols for overdose patients.

- Overdose patients should not be automatically given activated charcoal, gastric lavage, or whole bowel irrigation, but that practice continues in many EDs.
- Most poisoned patients should be lavaged and given activated charcoal if the time frame is under one hour from exposure.
- Not all poisoned patients require decontamination if the time frame is greater than one hour from ingestion.
- The use of gastric lavage is indicated only for patients with recent, potentially toxic ingestions or patients with significant ingestions and altered level of consciousness.
- Overdoses of substances with anticholinergic properties might still need some decontamination beyond the one-hour time frame.

Those practices are outdated, she emphasizes. “The position papers have been written to reflect these changes.” (See **Sources box for how to obtain copies, p. 79, and Recommended Reading list for other studies on this topic, p. 85.**)

You might assume that almost all patients with ingested poisons need some form of decontamination, but that’s no longer the case, says Courtemanche. “Nothing is routine in GI decontamination anymore.”

Now, every patient requires a risk/benefit evaluation for doing any form of decontamination if the time frame is greater than one hour from ingestion, Courtemanche says.

“Drugs and products with anticholinergic properties may still need some decontamination beyond the one-hour time frame,” she notes. “But that may mean just activated charcoal, without lavage.”

Each patient should be evaluated individually, with advice from a regional poison center, to better assess the need to do any gastrointestinal decontamination, says Courtemanche. “Many factors affect this decision, including whether the patient’s stomach is empty, their age and past medical history, the combination of medications or products ingested, and vital signs.” (See **story on working with poison centers to determine treatment, p. 86.**)

According to the position statements, if gastric decontamination is to be used, you should administer activated charcoal, with whole bowel irrigation being used for a few indications, Meyer notes. “Gastric lavage and cathartics were not recommended other than for uncommon situations.” (See **contraindications for cathartics, p. 80.**)

Here are practices recommended by the position statements (see **chart for other new approaches, p. 81**):

- **Don’t automatically give activated charcoal.**

You shouldn’t administer single-dose activated charcoal to poisoned patients routinely, says Courtemanche. Studies show that the effectiveness of activated charcoal decreases over time, she notes.

Here are the indications for activated charcoal, according to the guidelines:

- Based on volunteer studies, activated charcoal is more likely to produce benefit if you administer it within one hour of poison ingestion.

- Consider the administration of activated charcoal if a patient has ingested a potentially toxic amount of a poison up to one hour following ingestion.

- You might consider activated charcoal more than one hour after ingestion, but there are insufficient data to support or exclude its use.

- **Don’t automatically lavage patients.**

The use of gastric lavage is indicated only for patients with recent, potentially toxic ingestions or patients with significant ingestions and altered level of consciousness, says Weinman.

Despite the guidelines and literature supporting this new approach, many EDs still lavage overdose patients routinely, Meyer reports. The position statement is based on studies which showed no significant difference in outcomes among ED patients who were treated with charcoal, as compared to those who received both gastric lavage and charcoal, she says.

Of all the gastric decontamination methods, gastric

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lavage is the most likely to have clinically significant complications, Meyer adds.

- **Intubate patients if there is question of airway compromise.**

An unprotected airway could worsen the patient condition during lavage, says Courtemanche. "This is one of the reasons the outcomes of lavaged patients are poor," she says. "If lavage is being instituted and there is any question of airway compromise, then the patient should be intubated prior to this."

This basic principle is ignored too often, Courtemanche stresses. "Consider whether you are actually improving outcomes by lavage or worsening them because of aspiration," she advises.

The following are contraindications for lavage, according to these guidelines:

- patients with the loss of airway protective reflexes (unless intubated), such as in a patient with a depressed state of consciousness;

- patients who have ingested a corrosive substance such as a strong acid or alkali;

- patients who have ingested a hydrocarbon with high aspiration potential;

- patients who are at risk of hemorrhage or gastrointestinal perforation due to pathology, recent surgery, or other medical condition that could be further compromised by the use of gastric lavage.

- **Stop using syrup of ipecac routinely.**

Do not administer syrup of ipecac routinely when caring for poisoned patients, because there is no data showing any benefit to patient outcomes, Courtemanche says. Ipecac also might delay administration or reduce the effectiveness of activated charcoal, oral antidotes, and whole bowel irrigation if administered, she adds.

Never give ipecac to patients with a decreased level or impending loss of consciousness, or who have ingested a corrosive substance or hydrocarbon with high aspiration potential, notes Courtemanche.

Ipecac should not be used in the ED setting any longer, with the exception of pediatric iron tablet ingestions, says Courtemanche. "It's also not used as frequently in the home setting," she notes. "This is a significant change in management."

- **Don't use whole bowel irrigation routinely.**

There is no research which conclusively shows that whole bowel irrigation improves outcomes," says Courtemanche. According to the guidelines, there are no established indications for whole bowel irrigation. However, the practice may have value in a limited number of toxic ingestions, such as sustained-release or enteric-coated drugs; substantial amounts of iron; substantial amounts of poisons not adsorbed by activated charcoal; or packets of illicit drugs.

SOURCES

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Copies of the position statements on gut decontamination can be accessed at the American Academy of Clinical Toxicology Web site: www.clintox.org. Copies of the position statements can also be ordered for \$12.50 including shipping and handling. To order copies, contact:

- **Heather Miller**, Executive Director, American Academy of Clinical Toxicology, P.O. Box 8820, Harrisburg, PA 17105-8820. Telephone: (717) 558-7847. Fax: (717) 558-7841. E-mail: hmillier@pamedsoc.org.

- **Consider decontamination if exposure occurred less than an hour ago.**

Most of the time, patients should be lavaged and given activated charcoal if the time frame is under one hour from exposure, says Courtemanche. "If it is longer than that and if the drug or substance has anticholinergic properties, it also may be helpful to lavage," she says. It depends on the drug(s) or substance(s) that were ingested, and the timing, she adds.

About 32% of the ingested drug is removed from the stomach when gastric lavage is performed one hour after drug ingestion, Meyer notes. "The percentage returned diminishes rapidly after the one hour. However, it is rare for a patient to present in a time frame that allows us to be lavaging within one hour."

Reference

1. American Academy of Clinical Toxicology; European Association of Poisons Centres and Clinical Toxicologists. Position statements: Gut decontamination. *J Toxicol-Clin Toxicol* 1997; 35:695-792. ■

In an overdose, treat the patient, not the poison

When you treat an overdose patient, focus on symptoms instead of substances, recommends **Steve Weinman**, RN, BSN, CEN, emergency department instructor at New York Weill Cornell Medical Center at New York (City) Presbyterian Hospital.

Special Report: Overdose Patients in the ED

Treating the patient instead of the poison is one of the most basic rules of toxicology, but it's often overlooked, notes Weinman.

"The small percentage of drug overdoses that do display symptoms of toxicity are often treated based on the symptoms they display," he stresses. "Basic treatment typically is geared toward measures that decreased drug absorption." (See **protocol for management plan for poisoned patients, pp. 81-84.**)

There are very few poisonings/overdoses that have antidotes, says **Diana Meyer**, RN, MSN, CCNS, CCRN, CEN, clinical nurse specialist for emergency services at Presbyterian Intercommunity Hospital in Whittier, CA.

"The care is supportive and specific to the symptoms," Meyer explains. "There are literally thousands of products that can poison us, and only about 20 of those appear on a routine toxicology screen."

Here are some recent updates for management of overdose patients:

• **Protect yourself from exposure.**

When the poison suspected is an organophosphate, cyanide, or carbamate insecticide, take precautions to protect yourself from exposure while caring for the patient, Meyer cautions.

• **Know which patients should be admitted.**

Overdose patients should be admitted when airway, breathing, circulation and disability continue to be problems, when antidote treatment will take several hours (such as in Tylenol overdose), or when sequelae may be expected because of the type of poison, says Meyer.

Typically, most overdose patients are observed in the ED for four to six hours, says Weinman.

"The vast majority of overdose patients will display some degree of symptomatology within this time frame," he says.

Patients who have ingested a toxic or lethal dose of a drug, display moderate to severe symptomatology, or are judged to be a threat to themselves or others should

Contraindications for cathartics

According to current guidelines, use of cathartics alone are not recommended, and data are conflicting regarding the use of cathartics in combination with activated charcoal. The guidelines state that:

- The routine use of a cathartic in combination with activated charcoal is not recommended.
- If a cathartic is used, it should be limited to a single dose in order to minimize adverse effects.
- There are no definite indications for the use of cathartics in the management of the poisoned patient.

However, there are several contraindications for cathartics, according to the guidelines:

- absent bowel sounds, recent abdominal trauma, recent bowel surgery, intestinal obstruction, or intestinal perforation;
- ingestion of a corrosive substance;
- volume depletion, hypotension, or significant electrolyte imbalance.
- Magnesium cathartics should not be given to patients with renal failure, renal insufficiency, or heart block.
- Cathartics should be administered cautiously to the very young (<1 year of age) and to the very old (>75 years).

Source: American Academy of Clinical Toxicology, Harrisburg, PA; European Association of Poisons Centres and Clinical Toxicologists, Birmingham, United Kingdom. Position Statement: Cathartics.

be admitted, says Weinman. "This is typically a minority of the patients."

• **Use toxidromes.**

Toxidromes are groups of symptoms that help narrow the choices of agent to a class of poisons, such as opiates, stimulants, cholinergics, and anticholinergics, says Meyer. "Using these can help you fine-tune your treatment of patients."

For example, symptoms of the anticholinergic toxidrome include tachycardia, hyperthermia, psychosis, flushed dry skin, mydriasis, and decreased bowel sounds, says **Linda Courtemanche**, RN, CSPI, director of the New Hampshire Poison Information Center in Lebanon.

(Continued on page 84)

General Management of the Poisoned Patient

Assessment

- A. Treat the patient, not the poison! Above all, do no further harm.
- B. General approach to the poisoned patient:
 - 1. Assess the patient and support vital functions.
 - Airway-airway-airway!
 - Monitor cardiac status, vital signs, fluid intake and output, body temperature, and mental status.

Toxidromes

- Paying particular meticulous attention to the initial and repeat vital signs is of extreme importance if one is to identify a pattern of changes suggesting a particular drug or group of drugs.
- Toxidrome is a coined phrase to aid the clinician in recognizing the groups of signs and symptoms that tend to consistently result from particular toxins.
 - 2. Patients in coma or altered mental status should receive oxygen, naloxone (Narcan), thiamine (in adults), and have glucose measured immediately or get dextrose 50%.
 - 3. Assess the substance in question and the route of administration.
 - 4. Prevent further absorption.
 - a. Drugs are absorbed, distributed, metabolized, and eliminated. The entire goal is to **STOP THE ABSORPTION AND HASTEN THE ELIMINATION.**
 - b. Swallowed Poisons:
Goal is to physically remove from the stomach.
Ipecac is favored for home use.
Not for:
 - caustics;
 - substances that cause mental status change (drowsy or seizures);
 - cardiovascular compromise;
 - use in children when greater than 30 minutes of ingestion;
 - vomit until clear.
 - c. Lavage
 - Best with a cuffed endotracheal tube.
 - Position the patient on left lateral decubitus in Trendelenberg.
 - Tube size 22-28 child; 36-40 adult.
 - Use warm saline or water for children and give in 50-100 ml aliquots.
 - 300 ml in adults.
 - Until clear, not just 1,000 ml.
 - Lavage return should approximate fluid given.
 - d. Activated Charcoal
 - Ultra-fine charcoal powder adsorbs most drugs except small molecules like lithium iron and alcohols.
 - 1 gram/kg for children, 50 to 100 grams for adults.
 - Drugs with an affinity to charcoal; salicylates, phenobarbital, theophylline, digoxin, and tricyclic antidepressants.
 - Complications: vomiting -> aspiration.
 - Messy — prejudiced against it.
 - e. Cathartics
 - No cathartic under 1 year old.
 - Sorbitol — usually found in premixed charcoal.
 - Mag citrate 4 ml/kg.
 - Give only once and document it.
 - Bowel sounds must be present to give charcoal and cathartic.
 - f. Multiple-Dose Activated Charcoal
 - NOT multiple-dose cathartic
 - Hastens the elimination for those drugs that:
 - are excreted in the bile (interrupts recirculation);
 - gut dialysis;

— effective against tricyclic antidepressants, theophylline, salicylates, lead, isoniazid (INH), digoxin, and phenytoin.

g. Whole Bowel Irrigation

- Relatively new concept of safe, rapid catharsis
- Indications:
 - drugs not bound to charcoal;
 - sustained-release products;
 - iron;
 - lithium;
 - rising blood levels;
 - acute lead ingestion.
- Procedure
 - Colyte or Go-lytely orally or N/G tube
 - Child 500 ml/hr
 - Adult 2,000 ml/hr
- Caution: Need bowel sounds in order to use
- Have patient sit on a bedside commode.

5. Advanced therapies for hastening elimination

a. Hemodialysis

- Used when there is:
 - a low volume of distribution;
 - low protein binding;
 - must be water-soluble.
- Indicated in small group of drugs/substances i.e., Lithium, salicylates, ethylene glycol, methanol, ethanol, and isopropyl alcohol.
- Risk of drop in blood pressure.
- Fluid and electrolyte imbalance.

b. Charcoal Hemoperfusion

- Useful for drugs bound to activated charcoal, i.e. short-acting barbiturates, Amanita mushroom poisonings, and paraquat pesticide overdose.

c. Renal Elimination: Forced Diuresis

- Drug excreted in the urine as parent compound or active metabolite. Need a low volume of distribution and low protein binding.
- Used rarely.
- Used in isoniazid (INH) overdose.
- NO ACID DIURESIS in older days used for amphetamines, phencyclidine, and strychnine.

d. Alkaline Diuresis

- Hastens the elimination and is safe.
- Used in salicylates and phenobarbital overdoses and tricyclic antidepressants.
- Goal: Urine pH 7.5-8.
- 3 amps sodium bicarbonate in 1 liter D5W (1-2 mEq/kg)
- Keep urine flow 3-6 ml/hour.

Red Flag Toxins

What constitutes a red flag in a poisoning?

- A. Something that causes a rapid clinical response that leads to a life-threatening event.
- B. Something that causes toxicity, but has delay in time to form a metabolite which then leads to an irreversible state.
- C. Small quantities of products or medications that are “deadly in a single dose.”
- D. New products or medications that have little toxicity information available.

What are some of those products or medications?

A. Rapid responders

- Beta blockers
- Oral hypoglycemic drugs (all ingestions require overnight admission. 16 to 24-hour delay in hypoglycemia)

- Lindane (found in Kwell or other pediculicide)
- Nicotine
- Clonidine (Catapres) and transdermal patches
 - Antihypertensive
 - Used in smoking cessation and cocaine withdrawal
 - No ipecac signs and symptoms occur in 30-90 minutes
 - Narcan for respiratory depression — THIS IS COMMON
 - Early transient hypertension **do not treat.**
 - Altered mental status? Need six to 12 hours of heart monitoring until Asx x 4 hours
 - Mild hyperthermia
 - All children are referred to health care facility
 - Treatment: charcoal, Narcan IV fluids, trendel, and Dopamine PRN
 - Symptoms resolve in 24-48 hours
- Clozapine (Clorzaril)
 - Anti-psychotic drug.
 - Causes seizures, hypotension, tachycardia, central nervous system depression, and decreased muscle tone.
 - Symptomatic and supportive care; dopamine for hypotension.
 - Overdose requires several days of monitoring due to delayed effects of the drug.
- Tricyclic antidepressants
- Lomotil (Diphenoxylate)
 - Narcan
- Isoniazid (INH)
 - In overdose seizures within one hour of ingestion (35-40mg/kg)
 - Death 80-150mg/kg
 - LARGE DOSES OF PYRIDOXINE used synergistically with Valium to stop seizures
- Antimalarials (Cloroquine)
 - Has a quinidine-like effect on the heart and vasodilatory properties.
 - Symptoms occur rapidly, and death can occur in one to two hours even with small ingestion.
 - Transport by ambulance!
 - Cardiovascular failure from hypotension, ventricular dysrhythmias, respiratory arrest, and pulmonary edema.
 - If asymptomatic for 6-8 hours post-ingestion, they can be sent home.
- Oil of wintergreen
 - 98% methyl salicylate = 1400mg ASA/ ml
- Darvon (propoxyphene)
- Camphor
- Organophosphate pesticides
- Calcium Channel Blockers
- Chloral hydrate
 - Prolonged coma

B. Metabolite formers?

- Nail glue removers containing acetonitrile, which converts to cyanide; use lily cyanide kit
- Methanol-containing products (i.e., windshield washer fluid, dry gas, Sterno)
- Ethylene glycol (antifreeze)
- Acetaminophen

C. Deadly in a single dose?

- Pipeline cleaners used in barns or milking parlors
- Oil of wintergreen
- Beta blockers
- Calcium channel blockers
- Visine, Afrin (imidazoline derivatives)
- Sodium azide
 - Direct-acting vasodilator

- At the cellular level, inhibits cellular respiration, producing a metabolic acidosis
- Product found in air bag inflation (gas generator) and degrades to nitrogen gas
- Preservatives in lab reagents
- Commercial Isotonic buffering solution as a preservative
- Explosive industry
- Symptoms: hypotension, headache, weakness, coma, seizures
- Symptoms occur and progress quickly
- Cloroquine

D. Miscellaneous

- Rat bait contains new and improved longer-acting anti-coagulants, i.e., Brodifacum found in “Just One Bite.”
- Iron is the No. 1 cause of pediatric deaths due to poisoning.

Source: New Hampshire Poison Information Center, Lebanon, NH.

(Continued from page 80)

• Read up on current literature.

Nurses should keep abreast of the current toxicology research on modalities of treatment, drugs, and treatment modalities that have not proven to benefit the patient and might even be deleterious, Weinman advises. (See **Recommended Reading**, p. 85.)

Herbals have side effects

• Ask about herbal supplements.

When taking the history of an overdose patient, don't forget to ask about herbs or supplements the patient is taking, Courtemanche advises. “Drug interactions can occur, and certain herbal drugs are known to have certain side effects or adverse reactions.”

• Know what your hospital lab includes in a toxicology screen.

“If they are not looking for amphetamines, they will not show up as positive in the screen,” Courtemanche notes.

• Evaluate the patient's suicide risk.

Statistically, 7%-10% of overdoses are suicidal gestures, but this is believed to be under-reported, says Weinman.¹

These patients need to be medically evaluated for stability, treated as indicated, then referred for psychiatric evaluation prior to discharge from the ED, he advises. Suicidal patients need to be monitored closely, and often they are placed on one-to-one observation to ensure they do not elope until medically cleared and evaluated by a psychiatrist or other appropriate mental health professional, Weinman adds.

Obtain an acetaminophen concentration on all

suicidal patients, regardless of other substances involved, notes Courtemanche. “Draw a level when the patient arrives.”

Sustained release requires two levels: One at four hours after ingestion and again at eight hours, Courtemanche says. “If either is toxic according to the nomogram, the patient should be treated accordingly.”

Over half of suicidal patients' histories are incorrect, notes Courtemanche. Take what the patient says as “stated history” and try to prove the facts, she advises. Determine: When was the prescription filled? How many pills were used? How many are left? “Realize that even then, the patient may have gone to two pharmacies, and you still may not have the facts.”

Reference

1. Litovitz TL, Smilkstein M, Felberg L, et al. 1996 Annual report of the American Association of Poison Control Centers toxic exposure surveillance system. *Am J Emerg Med* 1997; 15:447-500. ■

SOURCE

For more information about approaches to overdose patients, contact:

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Recommended Reading

The following is a partial listing of studies pertaining to decontamination of patients using cathartics, ipecac, whole bowel irrigation, activated charcoal, and gastric lavage.

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Call poison center for overdose info

Next time you're treating an overdose patient, make a call to your local poison center before you make a decision about decontamination, recommends **Linda Courtemanche**, RN, CSPI, director of the New

Hampshire Poison Information Center in Lebanon. "Poison center staff and toxicologists are constantly evaluating and changing practice as the result of new data that is being collected and reported," she says.

Nothing is routine in toxicology anymore, Courtemanche stresses. "Each and every patient requires individualized care for their exposure."

Contact your local poison center for each and every human exposure to a poison you treat in your ED, Courtemanche advises. "The more clinical information about the specific patient that is provided, the more individualized information can be returned," she says.

Poison centers network

Through the Harrisburg, PA-based American Association of Poison Control Centers Association, the networking done by local poison centers is outstanding, Courtemanche says. "You can reap these benefits by contacting the center for each patient to consult about the exposure," she says.

Include the following in your discussion, she recommends:

- patient condition and vital signs at the time of the call to the poison center. Be sure to listen for bowel sounds to know if they are present or not to help with the assessment;
- estimated time of exposure if known, and if not known, that is an equally important negative;
- substance(s) involved.

New information and clinical effects of new drugs, new products, and even street drugs are continually monitored by poison centers, Courtemanche notes.

Poison centers continue to follow up on the patient once they leave the ED until medical outcomes are known, Courtemanche says. "Patient outcomes are followed throughout hospitalization or at home if the patient is discharged," she says.

The poison information specialist may know local issues, she says. "Furthermore, it enhances surveillance capabilities, allowing more rapid detection of new or unusual hazards," she says. ■

Use this form to ID children with special needs

How would you like to know a child's medical history, pediatrician, and allergies minutes after they walk in the door of your ED? A new Emergency Information Form (EIF) for Children with Special Needs, developed by the Elk Grove Village, IL-based American Academy of Pediatrics and the Dallas-based American College of Emergency Physicians (ACEP), puts all that information at your fingertips. (See copy of form, pp. 87-88.)

The form will help you to obtain accurate and relevant medical information when it can't be readily obtained from a parent or physician. "These are complicated kids, and if you are unaware of their previous medical history, you can get into trouble in ways you wouldn't expect," says **Michael Gerardi**, MD, FAAP, FACEP, vice chairman of the department of emergency medicine at Morristown (NJ) Memorial Hospital and chair of ACEP's pediatric emergency medicine committee.

Medical records are notoriously hard to find, notes Gerardi. "This takes all the mystery out of the case, without spending half hour tracking down a specialist."

MedicAlert, a Turlock, CA-based emergency medical information service, will serve as a central repository for the EIF, so the form won't have to be on file in

(Continued on page 89)

EXECUTIVE SUMMARY

A new Emergency Information Form (EIF) for Children with Special Needs was developed jointly by the American Academy of Pediatrics and the American College of Emergency Physicians.

- If a child has an EIF on file, you should add medical information to the form as needed.
- The EIF includes the name of the child's pediatrician, telephone contact numbers, and specific instructions for interventions to take.
- For children with special needs who haven't filled out an EIF, hand blank copies of the forms to parents along with the child's discharge instructions.
- The form can be reproduced without permission since there is no copyright.
- MedicAlert, a Turlock, CA-based emergency medical information service, will serve as a central repository for the EIF, so the form won't have to be on file in your ED.

Source: American College of Emergency Physicians, Dallas; American Academy of Pediatrics, Elk Grove Village, IL. Permission to reprint granted with acknowledgment.

(Continued from page 86)

your ED, stresses **Alicia Hugg**, MA, RN, manager of professional programs for MedicAlert. "Health care professionals can retrieve the needed information by fax from anywhere in the world, 24 hours a day."

However, the advantage of MedicAlert is that the EIF is stored in a central location in case the child is away from home or with people who might take him/her to an ED in which there is no EIF on file.

The form could potentially save lives in the ED, since you probably have limited knowledge of their unique medical history, notes Hugg, adding that the form is especially useful for children with physically unrecognizable conditions such as allergies.

To determine if a child has an EIF on file, providers can call MedicAlert Foundation toll-free from anywhere in the world and request the EIF for that child [The hotline number is (800) 625-3780, and the collect call number is (209) 634-4917.] The EIF is faxed within minutes to the health care professional.

The child's primary care provider, subspecialist, or parent should update the form every year or two, with information such as the performance of a major procedure or significant changes in a patient's condition, Hugg explains. However, if a child does have an EIF on file, be proactive in adding medical information to the form which the parent, ED, or specialty physician might have overlooked, she recommends.

"A child or parent may have related details to the nurse which weren't obvious to the examining doctor," she says. For example, under the form's "Management Data" heading, a child or parent might cite a certain food allergy, but might forget to state the child is also allergic to a certain medication.

The form gives you essential information, including the name of the child's pediatrician, telephone contact numbers, and specific instructions for interventions to take if the child has unusual symptoms, says Gerardi. "If the child doesn't have the form with them, and it's at school, MedicAlert will fax it to us," he says.

Often, in times of crisis, parents can't remember important details, Gerardi says. "They are not medical professionals, and under stress they may not remember the order of their child's surgeries, or whether it's the right or left side, or the name of a drug the child is taking," he says.

The form includes contact numbers of the child's guardian, so it can expedite the process of getting the parent to the ED if the child is injured at a school trip or friend's house, Gerardi notes.

For children with special needs who don't yet have an EIF, information from both the physicians and parents is needed to complete the form, says Gerardi.

"Parents can fill out about 80% of the information, and pediatricians fill out the rest."

ED nurses should be advocates of the EIF, says Gerardi. "Hand out blank forms for parents to fill out, and ask them to bring the forms back to the ED," he advises. "We are collecting the forms from parents now, and we keep them on file at all the different EDs in our system."

If parents plan on taking their child to one or two local EDs, it would be helpful for the EIF to be on file at those EDs, notes Gerardi. It would eliminate the steps of contacting MedicAlert, he says.

Have pads of the forms available in the ED, so you can hand them out with discharge instructions, recommends Gerardi. You can reproduce the form without permission since the information is not copyrighted.

The EIF is a simple tool that provides expert advice and information in a timely fashion, stresses Gerardi. "It is an exciting innovation that will benefit everyone involved in an acute emergency: the patient, the parents, the prehospital providers, and the nurses, physicians, and consultants in the ED," he says. ■

SOURCES

For more information about the Medic Alert form, contact:

- **Michael Gerardi**, MD, FAAP, FACEP, Morristown Memorial Hospital, Department of Emergency Medicine, 100 Madison Ave., Morristown, NJ 07962. Telephone: (973) 971-7972. Fax: (973) 290-7202. E-mail: michael.gerardi@ahsys.org.
- **Alicia Hugg**, MA, RN, MedicAlert Foundation, 2323 Colorado Ave., Turlock, CA 95382. Telephone: (209) 669-4033. Fax: (209) 669-2495. E-mail: Hugg_Alicia@medicalert.org.do. Web site: www.medicalert.org.

Medic Alert forms can be downloaded free of charge from the American College of Emergency Physicians' Web site (www.acep.org) and the American Academy of Pediatrics' Web site (www.aap.org). The forms also are available for purchase in packets of 100 from the American Academy of Pediatrics for \$19.95 plus \$5.50 shipping and handling. To order forms, contact:

- **American Academy of Pediatrics**, Publications Department, P.O. Box 747, Elk Grove, IL 60009-0747. Telephone: (800) 433-9016, Ext. 5898. Fax: (847) 228-1281.



JOURNAL REVIEWS

Hampers LC, Trainor JL, Listernick R, et al. Setting-based practice variation in the management of simple febrile seizure. Acad Emerg Med 2000; 7:21-27.

Simple febrile seizures are managed differently depending on the setting, says this study from seven EDs in the Chicago area. Two were tertiary academic pediatric EDs (PEDs), and five were community-based general EDs (GEDs).

Four hundred and fifty-five records that met criteria for simple, first-time febrile seizure were reviewed. The two groups did not differ in mean age, vital signs, reported duration of seizure, or prior antibiotic use, yet a significant practice variation was discovered. Here were key differences between the two types of EDs:

- Lumbar puncture was performed more often in the GED group (33% vs. 22%). No patients were found to have bacterial meningitis.
- The patients in the GED group were more likely to receive parenteral antibiotics in the ED (56% vs. 2%).
- The patients in the GED group were more likely to be admitted or transferred (18% vs. 4%).

Because children with febrile seizures usually present to the nearest ED, they are managed by practitioners with varying levels of pediatric training and expertise. As a result, children presenting to GEDs were given more extensive evaluation, such as lumbar punctures and serum electrolytes. They were also managed more conservatively than those in PEDs, with a higher admission rate and higher rate of prescriptions for antibiotics upon discharge.

Further study should be done to determine the reasons for this variation and to find out if practice also varies in other conditions such as croup, asthma, fever in infants, and nonfebrile seizures, say the researchers. "If this finding pertains to other conditions, pediatric emergency medicine specialists may be presented with an educational opportunity to standardize the care of children in all settings." ▼

Mellick LB, Milker L, Egsieker E. Childhood accidental spiral tibial (CAST) fractures. Ped Emerg Care 1999; 15:307-309.

Isolated spiral tibial fractures are a common injury seen in children less than 8 years old, and are most often accidental, according to this study from the Medical College of Georgia in Augusta and Riverside Regional

Medical Center in Columbus, OH. Fifty-five patients with isolated spiral tibial fractures were studied. The study's findings indicated that the "toddler's fracture" is not a distinct clinical entity, but part of a spectrum of presentations of childhood accidental spiral tibial (CAST) fractures, say the researchers. Therefore, the term "toddler's fracture" should be replaced with the CAST terminology, they argue.

The study also notes that child abuse can present as isolated tibial fractures, but those injuries are most often accidental in nature. The most frequent mechanism of this injury is a fall. "When spiral fractures of long bones in young children are considered evidence of child abuse by pediatricians and social workers, the formal investigation of these injuries can result in significant psychological, social, and financial costs," say the researchers. "It's important to recognize that isolated spiral fractures of the tibia are most frequently accidental in nature." ▼

Lerner EB, Moscati R. Duration of patient immobilization in the ED. Am J Emerg Med 2000; 18:28-30.

Patients are left on backboards for significant periods of time even when no radiographs are taken prior to backboard removal, this study from the State University of New York at Buffalo's School of Medicine and Biomedical Sciences reports.

The total backboard time of patients brought from the scene of injury by ambulance and immobilized on a backboard in the field was measured for 138 patients. The total ED backboard time was 53.9 minutes for patients who were removed from the backboard prior to radiographs, and 181.3 minutes for patients who had radiographs before being removed from the backboard. The study found that iatrogenic pain is caused from patients spending extended periods of time immobilized on backboards.

"Based upon our observed times and the time required to produce iatrogenic pain in the volunteer studies, this group of initially pain-free patients would be likely to develop pain from immobilization," the researchers report. The iatrogenic pain may cause the patients to need radiographic clearance and still longer immobilization, they add. Here are three possible solutions offered by the researchers:

- Convince ED physicians that these patients must be evaluated promptly after arrival to the ED, or more comfortable immobilization boards could be developed.
- Develop criteria to permit clinical evaluation in the prehospital setting, avoiding immobilization in patients who do not need it.
- Develop more comfortable immobilization boards or techniques to reduce patient discomfort. ■

Does Joint Commission OK patient tracking boards?

Is your patient tracking board in violation of Joint Commission requirements? Your need for information about patients might conflict with standards regarding patient privacy, which is a key focus of surveyors from the Oakbrook Terrace, IL-based Joint Commission on Accreditation of Healthcare Organizations, says **Ann Kobs**, president and CEO of Type 1 Solutions, a compliance consulting firm specializing in preparation for Joint Commission surveys, based in Fort Myers, FL, and formerly associate director for the department of standards interpretation unit at the Joint Commission.

"EDs all over the country struggle with this issue, and so do the surveyors," she stresses. "I never enter an organization that the question is not raised."

Basically the purpose of a tracking board is to let caregivers know who is in what room and who is caring for them, notes Kobs. Depending on what information is listed, it might raise a red flag with Joint Commission surveyors, she warns.

Don't overreact

Some EDs have eliminated patient tracking boards because they fear Type 1 recommendations from surveyors. "This is an extremely high profile issue. However, I take that to be an overreaction," says Kobs.

Here are ways to comply with the Joint Commission's requirements regarding communication boards, according to Kobs:

- If a patient expresses a concern about his or her name being posted, that concern should be honored.

SOURCES

For more information about Joint Commission standards and tracking boards, contact:

- **Ann Kobs**, President/CEO, Type 1 Solutions, 8695 College Parkway, Suite 307, Fort Myers, FL 33919. Telephone: (941) 415-4454. Fax: (941) 415-4450. E-mail: aejbbk@aol.com.
- **Carole Patterson**, Joint Commission on Accreditation of Healthcare Organizations, Department of Standards, One Renaissance Boulevard, Oakbrook Terrace, IL 60181. Telephone: (630) 792-5899. Fax: (630) 792-5942. E-mail: cpatterson@jcaho.org.

Otherwise, a patient's name (first and last), room/bay number, attending physician, and caregiver can be posted on the board.

- It is perfectly acceptable to list lab work and X-rays being ordered.
- Diagnosis and chief complaints are the only items that should never be posted on a tracking board, according to **Carole Patterson**, director of the Joint Commission's standard and interpretation group. "Anything can be listed on the board, with the exception of information that will tell people what the diagnosis is and what is wrong with the individual."

No diagnosis, even with initials

The Joint Commission has had this stance for over five years, Kobs notes. "The diagnosis just isn't acceptable to list, even with initials or abbreviations. Chief complaints also are not appropriate."

A listing of diagnoses negates patient dignity in the eyes of the Joint Commission, Kobs explains. "They are no longer known as a person, but instead are known as a disease entity," she says.

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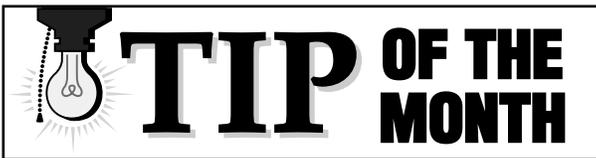
Editorial Questions

For questions or comments, call Joy Daughtery Dickinson at (912) 377-8044.

• Although some EDs are using doors with hinges, with one door over the patient's name and the other over the chief complaint, this system is not acceptable, Kobs says. "The door with hinges won't stay closed. You can count on it."

• If your ED is given a Type 1 recommendation and you feel it is in error, the surveyor might be unfamiliar with the interpretation, says Kobs. "In that instance, the organization should approach the surveyor team leader and attempt to resolve it at time of survey. If it is unresolved, appeal the recommendation to Joint Commission, and it will in all probability be removed," she advises.

It is not unusual to hear of surveyors citing organizations just for having the board, regardless of what is on it, Kobs notes. "That is a Type 1 that should be appealed, as the central office of the Joint Commission should not let it stand." ■



Remove rings without cutters

Here's a resourceful way to remove objects such as rings, washers, etc., from swollen fingers when ring cutters aren't readily available, recommends **Lane A. McVity**, RN, BSN, patient care manager for the ED at Children's Hospital in Columbus, OH.

Using umbilical tape, which is similar to electrical tape, though slimmer, begin wrapping the finger at the distal end tip and overlap slightly moving proximally toward the object that is stuck, McVity explains.

Many times, the pressure you produce by wrapping will overcome that of the object that is stuck, pushing the blood underneath, says McVity. "When the wrap gets to the point of the object, you can cut the tape and attempt to push that end beneath the object [though this isn't always necessary] and slide it off of the finger, over the wrapping," she explains. "Umbilical tape is quite smooth and allows this nicely."

This method is especially useful when an object is large, as is the case with a washer or other similar objects, thus rendering ring cutters useless, notes McVity. ■

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CE objectives

After reading this issue of *ED Nursing*, the CE participant should be able to:

1. Identify clinical, regulatory, or social issues relating to ED nursing (see *Don't use outdated treatments — Follow current overdose guidelines; Does Joint Commission OK patient tracking boards?;* and *Journal Reviews* in this issue).
2. Describe how those issues affect nursing service delivery.
3. Cite practical solutions to problems and integrate information into the ED nurse's daily practices, according to advice from nationally recognized experts. ■