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IN THIS ISSUE

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Don't allow 'stable' elders to deteriorate during long waits

Potential for catastrophe is 'very high'

General malaise is the only complaint of a 77-year-old man and, other than a low-grade fever, his vital signs are within normal limits. But while waiting to be seen, he becomes mildly disoriented, tachycardic, and hypotensive, and he is diagnosed with urosepsis. If the changes in this patient's status go unnoticed, he could suffer circulatory collapse.

This is just one example of how an elderly patient suddenly can deteriorate in your crowded ED waiting room. The rate of ED visits by elderly patients increased 26% from 1993 through 2003, and those patients use the most resources and stay the longest, says a new study. The researchers conclude that ED visits by patients between 65 and 74 years of age could nearly double from 6.4 million in 2003 to 11.7 million by 2013.[1]

"Nursing ratios in the ED are not the same as on the floor, and patients are a lot less comfortable, too," says **Mary Pat McKay**, MD, one of the study's authors and associate professor of emergency medicine at the George Washington University Medical Center in Washington, DC. "The potential for a catastrophe is very high."

Patients older than 65 are more likely to get admitted than other patients (33% vs. 14% overall), and they often are boarded in the ED for hours or even days, says McKay. "This clogs up the system and puts *all* patients in danger,"

EXECUTIVE SUMMARY

ED nurses are caring for larger number of elderly patients, and the number is expected to nearly double by 2013, says a new study. These patients have more comorbidities, require more extensive work-ups, and might suddenly deteriorate in the waiting room.

- Reassess at least hourly for changes in blood pressure, pulse, respirations, and speech.
- Visually observe the patient's body positioning, skin color, capillary refill, and breathing.
- Instruct patients to alert triage nurses if their conditions change.

she says. "They wait unattended for hours in the waiting room, and some of them get tired of waiting and leave without any care."

Elderly patients are an increasing challenge for ED nurses at Emory University Hospital in Atlanta, says **Sam Shartar**, RN, CEN, ED nurse manager. "This group of patients is growing in numbers, which adds stress to the ED's resources," he says.

Burden is on triage

The burden placed on the triage nurse when the waiting room is full is tremendous, says **Margaret Miller**, RN, an ED nurse at Swedish Medical Center in Seattle. "You are responsible for looking after not only the new patients entering the department, but also all of the other patients who continue to wait — a potentially unsafe situation, to say the least."

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To avoid sudden deterioration of elderly patients, do the following:

• Reassess frequently.

Elderly patients have more comorbid diseases and require a more complicated work-up, says Shartar. "They are susceptible to sepsis and pneumonia," he says. "In both of these cases, the patient can present in triage with stable vital signs and subsequently deteriorate later during their visit," Shartar says.

Reassess vital signs, mental status, hydration, and functional ability to identify trends and changes in the patient's condition, says Shartar.

Hypovolemia is one condition that can change rapidly in your elderly patient, says Miller. "A younger person's cardiovascular system is usually pretty intact and can maintain a tolerable blood pressure for a longer period of time than the elderly patient with heart problems or peripheral vascular disease," she says.

When reassessing, look for changes in blood pressure, pulse, and respirations and speech, says Miller. "Depending on the patient's condition at initial triage, they should have vital signs taken at least every hour that they spend in the waiting room," she says.

Work closely with the charge nurse or the nurse determining placement of patients in ED rooms to move less ill patients to the hallway or holding area, advises Miller. "This can help expedite treatment of the patient whose condition is deteriorating in the waiting room," she says. **(See related story on triage of elderly patients on p. 63.)**

• Have a high index of suspicion.

If an elderly patient reports dizziness or weakness with no history of cardiac problems, for example, this is a situation that can deteriorate quickly. "If a quick look at the patient in triage doesn't tell the story, an ECG or cardiac monitor will tell," says Miller.

When taking the patient's vital signs, look at the heart rate, whether the rhythm is regular; and whether the pulse is bounding, full, weak, or thready; and correlate this with blood pressure, respiratory rate, and effort, says Miller. If the triage nurse has *any* concern due to irregularities with the patient's vital signs, he or she needs to have the patient placed on a cardiac monitor and have an ECG taken promptly to be reviewed by the ED physician, she says.

Use critical thinking along with your assessment to determine the severity of the elderly patient's illness, says Miller. "The acuity level for the elderly patient with fever is usually higher due to age and the knowledge that the patient can deteriorate rapidly," she adds.

If fever is present, suspect pneumonia or urinary tract infections that can progress to pyelonephritis and sepsis, says Miller. "These patients have a faster recovery rate when treated quickly with antibiotics," she says.

SOURCES

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• Use observation to assess severity of symptoms.

"Elderly patients also tend to downplay their symptoms, so you may need to observe them a little more closely," says Shartar. For example, your patient may deny that they are having difficulty breathing, yet as you observe them, they are tachypneic and demonstrate increased work of breath, he says.

Body positioning, skin color, capillary refill, the manner in which patients answer questions, and whether they have an inability to look directly at you all play a part in your assessment, says Miller. For example, the patient may give a low pain scale number that doesn't coincide with their body language, says Miller. "In this case, probe further with different questions and correlate the physical assessment findings with what the patient is saying," she advises. "Decide if your findings warrant moving the patient's acuity level higher."

When asking patients about their current illness, their answers may be vague and incomplete, says Miller. "Ask patients if they have ever had anything like this before. Listen to what the family member or friend that comes in with the patient has to say. Do they contradict the patient's story? Do they give you more information than the patient?"

• Remember that patients may have multiple problems.

Because many older patients wait longer than they should to seek medical care, by the time they do reach the ED, they have "multisystem" problems going on, says Miller. These may include hypertension, cardiac problems, hypertension, renal problems, diabetes, vascular insufficiency, and stroke, she says.

• Don't assume that others will alert you.

Elderly patients often come to the ED accompanied by family, friends, neighbors, or care workers, notes Miller. "This can give you some comfort knowing that if the patient turns for the worse, someone will make the triage nurse aware," she says. "But this 'comfort' also can work like a trap."

Many elderly patients don't want to appear "pushy," says Miller. "Before the patient leaves the triage booth, tell them or anyone with them to let the triage nurse know if their condition changes," she advises.

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Novel ways to improve triage of elderly patients

Automatically give patients higher acuity

Triage often is extra challenging with elderly patients, says **Korene Christianson**, RN, CEN, ED clinical director at Methodist North Hospital in Memphis, TN. "We are seeing a growing number of patients over the age of 65 in our ED," she says. "Finding out the 'main reason they came today' is often the biggest challenge."

To improve triage of geriatric patients, do the following:

• Put patients right into a room.

An "immediate bedding" practice implemented in Methodist's ED has significantly reduced wait times for elderly patients, says Christianson. "Medical screening can be completed quickly, and the chance of a fall or incident in the lobby is gone," she says.

Now, if there is a bed open, a patient does not stop in

EXECUTIVE SUMMARY

To get elderly patients treated more quickly, use an "immediate bedding" practice to place patients directly in rooms. Also, take the patient's age into account when determining acuity levels at triage.

- Chronic problems can exacerbate minor complaints.
- Elderly trauma patients have increased risk of mortality.
- Medications can mask serious problems.

SOURCES

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triage. **Marianne Fournie**, RN, BSN, MBA, corporate director of system ED services for Memphis-based Methodist Healthcare, said, "We even pulled the triage nurse from 3 a.m. to 9 a.m. in most of our facilities. This practice helps keep a constant flow in triage and prevents back up after 10 a.m. You can stay ahead of the game, which allows the patient to be seen by a provider sooner. This decreases your risk and could save lives."

Either registration or security representatives escort the patients into the department, and ED nurses place them directly into a room. If delays in triage do occur, charge nurses, who usually do not have a patient assignment, can help until every patient is seen, says Fournie.

"The charge nurse can perform a brief triage by just speaking with the patient and documenting on paper," she says. "We want to make sure that the patient at the 'end of the line' isn't a seriously ill patient such as a chest pain patient."

• Address needs of hearing-impaired patients.

If the ED is full and your elderly patient is alone, patients who are hard of hearing may not hear their names re-called for rechecks, adds Christianson.

To address this, use restaurant pagers for patients in the waiting room, says Fournie. "They vibrate and they light up, so missing someone calling out your name is not a problem. This would be a perfect solution for anyone who has a hearing deficit," she says.

• Automatically increase acuity levels.

When triaging an elderly trauma patient, take increased risk of mortality into account, says **Ann Bennett**, RN, MSN, nurse educator for the ED at University of California — Davis Medical Center. "If a patient arrives with a critical trauma and is over 65, we increase the level of acuity based on age alone," she says.

The patient's age also is considered during the medical screening examination that is performed on all patients, says Bennett. Older patients have decreased resistance to infection, limited chest expansion, changes in ability to sense pain, and depressed temperature-regulating mechanisms, says Bennett.

"The elderly cannot compensate under stress, like children can," says Bennett. "Blood pressure medications may mask hypotension. Beta-blockers may keep tachycardia at bay until late in the compensation process."

• Keep medication issues in mind.

Elderly patients are at risk for drug interactions, irregular compliance, misunderstanding of directions, and liver and kidney changes that alter absorption rates, says Bennett.

"Many of the problems elder patients come in with are related to the polypharmacy they are taking, or they may not be taking medications as prescribed," she says. "When taking multiple drugs, drug reactions, interactions, and side effects can mask serious problems."

• Remember that patients may downplay symptoms.

Geriatric patients may minimize symptoms such as chest pain or abdominal pain, says Bennett.

"This could be a simple gastroenteritis, a cardiac event, abdominal aneurysm, or some other surgical emergency," she says. "General shortness of breath may be a full-blown pneumonia."

• Consider chronic problems, which can complicate even minor complaints.

Geriatric patients often put off coming to the ED until their reserves already are used up, which can be a dangerous situation, says Bennett. "The patients delay seeking care because of fear, lack of transportation, or they chalk aches and pains up to old age," she says.

Chronic conditions may override new, smaller symptoms such as a cough that escalates into pneumonia or the headache that is really a bleed, says Bennett.

Ask these questions at triage to ferret out potentially life-threatening conditions:

— How is the pain different from your usual pain? What is different today about your pain/cough/dizziness?

— Has this ever happened before, or have you ever felt like this before?

— Are you actually taking all the medications your doctor prescribed? How/when are you taking them?

"Getting a detailed, focused exam about the chief complaint is important for all patients. But with geriatric patients, the extraneous information is almost equally important," says Bennett. "Ask about chronic diseases, medications, allergies, past medical, and surgical history." ■

WEB ALERT

Site gives free info on geriatric ED care

The next time an older person arrives in your ED with atypical or vague symptoms, an online resource could help you assess that patient.

"ConsultGeriRN is an excellent free resource for emergency nurses," says **Linda Scheetz**, EdD, RN, FAEN, assistant professor at New York University College of Nursing in New York City. "From triage to fast track, acute care, and observation areas in the ED, this site offers valuable information for all emergency nurses."

The site (www.ConsultGeriRN.org) was created in January 2008 by the Hartford Institute for Geriatric Nursing at the New York University College of Nursing as an evidence-based authority on the care of older adults.

When caring for an elderly patient with vague symptoms, select the topic "atypical presentation" from the drop-down menu of geriatric topics at the top of the page. "You'll find valuable information on atypical presentation, including risk factors, nonspecific symptoms that could signal a serious illness such as a serious infection, a silent myocardial infarction, malignancy, or acute abdomen, to name a few," says Scheetz.

Scroll down the page for information about possible illnesses your patient might have, and expected outcomes, says Scheetz. Links are provided to the Hartford Institute's "Try This" series of assessment tools, where you'll find resources to screen for problems such as depression and limitations in activities of daily living.

"As emergency department overcrowding worsens and the number of older-person visits increase, ED nurses need up-to-date, easy-to-access information to provide quality care," says Scheetz. "ConsultGeriRN is such a resource." *[Editor's note: For more information, contact: Linda Scheetz at (212) 998-5310. E-mail: ljs13@nyu.edu.]* ■

You can't assume headaches are benign

An elderly woman tells ED triage nurses she's had an excruciating, unrelenting headache for the past two days. She has a steady gait. She is alert and oriented without numbness, weakness, imbalance, difficulty with speech, or visual changes. She has no history of headaches. She does, however, have a history of atrial fibrillation for which she takes warfarin.

"That patient was my mother, with a subarachnoid hemorrhage," says **Lorin Bacon**, MS, RN, acute care nurse practitioner in the ED at Kaiser Permanente Medical Center in Roseville, CA.

EXECUTIVE SUMMARY

Since the vast majority of headaches seen in the ED are benign, there is a risk that patients may be undertriaged. Perform a thorough assessment to identify possible life-threatening causes, and ensure that patients receive appropriate pain management.

- Ask if headaches are gradual or sudden in onset.
- Determine if the patient has had similar headaches before.
- Consider parenteral opioids if migraine patients don't respond to standard treatments.

Triage nurse was 'remarkable'

Most often, a headache for several days is not an emergent matter, and an intracranial hemorrhage would drive most patients into the ED immediately, says Bacon. "For that triage nurse to recognize that this could be an emergent, potentially life-threatening event is remarkable," she says. "My mother could have been triaged to a clinic and waited for hours, and suffered a massive brain injury related to the buildup of blood and pressure in her head, and she could have died. She did not and is doing well without any untoward sequelae."

Would you be able to distinguish a migraine headache from a subarachnoid hemorrhage or ruptured cerebral aneurysm? Your diagnostic assessment is key, says **David R. Vinson**, MD, ED physician at the Permanente Medical Group in Roseville. **(See story on when to suspect a life-threatening condition, p. 67.)**

"Asking if this headache was gradual in onset, as opposed to sudden in onset, helps distinguish a migraine headache from a more worrisome alternative like a thunderclap headache," he says.

One in eight patients with a sudden thunderclap headache will have a ruptured cerebral aneurysm, notes Vinson. "Knowing the headache was gradual in onset makes the possibility of this kind of subarachnoid hemorrhage far less likely," he says.

To improve care of headaches, do the following:

- **Don't overlook classic "red flags."**

SOURCES

For more information on treatment of headaches in the ED, contact:

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- **David R. Vinson**, MD, Emergency Department, Permanente Medical Group, Roseville, CA. Web: www.permanente.net/homepage/doctor/davidvinson.

In addition to sudden onset, other worrisome signs are headache following head trauma, new onset of headache in patients older than 50 or patients with immunocompromise or malignancy, increased frequency or severity of headache, headache with concomitant systemic illness, and focal neurologic signs or symptoms, says Vinson.

Ask these questions at triage, says Bacon:

— Is this headache similar to one you've had in the past? How so?

— Are you experiencing any numbness, weakness, imbalance, difficulty with speech, or visual changes?

— Any recent trauma, head or otherwise?

— What medications do you take?

• Remember the patient's condition can change suddenly.

A patient may appear stable at triage and placed in a general exam room, but the patient may suddenly becomes unresponsive, with the CT scan revealing a huge head bleed, says **Mary J. Ross**, RN, BSN, CEN, charge nurse at the Emergency Medicine Trauma Center at Methodist Hospital in Indianapolis.

• Take a thorough history.

One woman told ED triage nurses she had a headache on and off for several months, which had been under the care of a primary care physician, recalls Ross. In addition, nurses learned that her family had complained of a change in the patient's personality and that the woman had a prior history of breast cancer.

"The brain is a common metastasis site," she says. "Along with these findings and her complaint of headache, the ED physician decided to do a head CT, which showed a huge brain tumor."

• Ask patients if the headache is similar to prior episodes.

If the headache is similar to pervious ones, then the likelihood of more worrisome causes of headache is greatly reduced, says Vinson.

Document this information for ED physicians, urges Vinson. "I love it when I pick up a chart for a headache patient and the nursing assessment opens with '27-year-old migraineur with gradual onset yesterday of her customary headache,'" he says. "That kind of assessment is invaluable."

• Identify what medications the patient has tried at home.

"This helps guide our pharmacotherapy," says Vinson. "If the patient just took her triptan, then I know I have a more limited repertoire of therapeutic options."

Many migraine patients respond well to intravenous (IV) antiemetic medications such as metoclopramide and prochlorperazine, notes Vinson. "Asking if the patient has received these medications in the past is useful information."

• Assess for medication side effects.

Patients given IV dopamine-blocking anti-headache medications may develop a side effect of restlessness known as akathisia, notes Vinson.[1] "Fortunately, the incidence of akathisia can be reduced in half if IV diphenhydramine is given prophylactically," he adds.[2]

If IV metoclopramide or prochlorperazine is given and restlessness is noted, diphenhydramine or lorazepam can be used for treatment, Vinson says.[3,4]

• Evaluate whether medications have been effective.

"It's not uncommon that the first round of medications might fail to abort the headache," says Vinson. "Sometimes, a second round of drugs is needed."

Some migraineurs will not respond to standard antimigraine treatment, notes Vinson. "For many of these refractory cases, parenteral opioid medication may be indicated," he says. "Sending a migraine patient home with continued pain increases their chances for a return visit."

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If patients say this, suspect life-threatening headache

Don't undertriage patients

If you assume that patients complaining of headache are nontherapeutic medication seekers or chronic complainers, you risk undertriaging these patients, warns **Rebekah Child**, RN, MSN, CEN, CNIV, an ED nurse at Cedars-Sinai Medical Center in Los Angeles. "It is imperative to watch out for warning signs that may indicate a condition much more severe than a common migraine or tension headache," she says. If patients say the following, suspect a life-threatening condition:

• **"This is the worst headache of my life."**

Erica Buss, RN, BSN, an ED nurse at St. Francis Hospital and Medical Center in Hartford, CT, says, "I have found that nine times out of 10, patients with the worst headache of their life do come back showing a bleed on their CT scan or MRI."

The patient usually is nauseated, unable to focus on directions, and might present with unsteady gait, slurred speech, and weakness, add Buss.

• **"My neck feels stiff."**

A headache along with high fever and neck stiffness may indicate meningitis, says Buss.

• **"My vision is blurred."**

This blurred vision could indicate a hemorrhage on the brain, although patients with migraines also have vision changes, says Buss. "Do a neurological exam at triage to test muscle strength, pupil size and reaction, and if the patient can follow directions appropriately," advises Buss.

• **"I have a terrible headache on one side."**

For example, a 22-year-old male might say he has a severe unilateral headache that started while he was lifting weights about an hour ago at the gym, says Child. "The triage nurse asks him if he would call this the worst headache of his life. He says yes. This information should not be taken lightly," she says. "This patient is the perfect age and has the perfect story for an aneurysm."

The most common cause of nontraumatic subarachnoid hemorrhage is a ruptured aneurysm, says Child. "Aneurysms are present in 0.5%-1% of the population. Of these, 1%-2% rupture per year," she says.

• **"I have severe, stabbing pain in the temples, and it hurts when I open my mouth."**

This may be a sign of temporal arteritis, an inflammation of the branches of the carotid artery, says Child. "This condition leads to visual loss or blindness in approximately 50% of untreated patients," she says. ■

EXECUTIVE SUMMARY

Warning signs of life-threatening headaches include patients reporting "the worst headache of my life," blurry vision, and severe unilateral headaches.

- Suspect meningitis if patients have neck stiffness and high fever.
- Do a neurological examination if patients report vision changes.
- Consider temporal arteritis if patients have temple and jaw pain.

SOURCES

For more information on assessment of life-threatening headaches in the ED, contact:

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Protocol addresses pain of adult trauma patients

Patients, nurses, and doctors benefit

Do your trauma patients suffer longer than they need to because of delays in pain management?

"There is no doubt that this is an issue for everybody," says **Jean Proehl**, RN, MN, CEN, CCRN, FAEN, emergency clinical nurse specialist at Dartmouth-Hitchcock Medical Center in Lebanon, NH.

Since a fentanyl-based pain management protocol was implemented for adult trauma patients at Dartmouth-Hitchcock, analgesics are given in 28 minutes on average, compared with 54 minutes before the protocol. The percentage of patients receiving analgesics within the first 30 minutes of arrival increased from 44% to 75%.[1]

EXECUTIVE SUMMARY

By using a fentanyl-based protocol for pain management of adult trauma patients, ED nurses cut delays in administering analgesics from 54 to 28 minutes.

- ED nurses no longer have to wait for a physician's written order.
- Nurses perform frequent reassessments and provide additional doses of analgesics as appropriate.
- The Behavioral Pain Assessment Scale is used for patients who are unable to communicate verbally.

Kevin M. Curtis, MD, the study's lead author and assistant professor of medicine in Dartmouth-Hitchcock's Section of Emergency Medicine, says, "The ED nurse has the primary role in the fentanyl protocol."

Based on an assessment of the patient's pain, hemodynamic stability, and Glasgow Coma Scale score, the ED nurse initiates the protocol, he says. If approved by the trauma physician, the nurse then performs frequent reassessments and gives additional doses of analgesics as appropriate, says Curtis. "The protocol has become such an integral component of our adult trauma management that any member of the team knows that it can be initiated by a simple verbal request to 'initiate the fentanyl protocol,'" he says.

Previously, it took about an hour for most trauma patients to receive analgesics, and this time frame has been cut in half in most cases, says Proehl. "When you think about a seriously injured trauma patient who has just arrived, 30 minutes is pretty good, because there are a lot of things that have to be done initially," she says. "Sometimes pain management isn't the first priority when you are trying to get the patient stable."

Before the protocol was implemented, all ED nurses were inserviced on medication dosages, with parameters available at the patient's bedside and in trauma rooms. "We had used fentanyl a fair amount before this, but now we were totally switching to fentanyl from morphine for trauma patients," says Proehl.

The ED already used the Faces, Legs, Activity, Cry, Consolability (FLACC) behavioral pain scale for preverbal children, but staff needed a scale for adults unable to communicate verbally, so the Behavioral Pain Assessment Scale is used.

Obtaining a physician's written order for pain medication in the middle of caring for a trauma patient is not very realistic, says Proehl. "They are supposed to include a fair amount of detail in written orders — dosing, time intervals — and that is never going to happen in the heat of battle," she says. "And it may not even happen afterward because they may not have time."

Now, all the ED physician has to say is "fentanyl protocol," and nurses can assess the patient and give medications as needed. "The best thing for us is we can manage the patient's pain and don't have to track down a doctor down to write orders repeatedly," says Proehl. "We've got our time intervals and physiologic parameters. We are in charge, and it makes it much easier. The docs love it too, because we're not bothering them. And the patient is comfortable."

SOURCES

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Do you follow guidelines for traumatic brain injury?

When guidelines for severe traumatic brain injury (TBI) are followed, deaths decrease by 50% and patients with poor outcomes decrease from 34% to 19%, according to a recent study.[1]

There is increasing compliance with the Brain Trauma Foundation's guidelines, says a new study looking at 413 trauma centers.[2] "However, there are still high-compliance and low-compliance trauma centers," says **Dale Hesdorffer**, PhD, the study's lead author and associate professor of clinical epidemiology at Columbia University in New York City.

"Optimal ED management involves prompt evaluation

EXECUTIVE SUMMARY

Compliance with guidelines for severe traumatic brain injury is increasing at trauma centers, says a new study. However, compliance at community EDs is likely to be poorer, and if this condition is not managed correctly, severe adverse outcomes can occur.

- Perform appropriate interventions to keep intracranial pressure under 15 mmHg.
- Assess and document the Glasgow Coma Scale score prior to the patient being intubated and sedated.
- Perform a noncontrast head CT scan within 10-15 minutes.

of the severity of the brain injury and rapid initiation of needed treatments, including treatment for hypotension and hypoxia as well as referral for surgical interventions," says Hesdorffer. **(See resource box, p. 70, to obtain a copy of the guidelines.)**

Rural, suburban EDs have difficulty

Compliance with the guidelines is more difficult for rural or suburban EDs with smaller volumes of TBI patients, says **Carol Ann Smith**, RN, CNRN, program coordinator of Hennepin County Medical Center's Traumatic Brain Injury Center. "Change is difficult, and to get people to follow the guidelines can be hard," she says. "It is easier to follow guidelines when you have a large volume of patients and it's something you deal with every day."

Smith says if TBI is not managed correctly in the ED, adverse outcomes may include:

• increased residual deficits to death, caused by extension of the area of injury due to low blood pressure;

• diminished cerebral blood flow or low oxygen levels;

• increased secondary injury such as cerebral swelling;

• a delay in surgical intervention.

The goal is for the TBI patient to spend no more than 20 minutes in Hennepin County's ED, says Smith. "These severely injured patients move very quickly through the ED, CT scan, and off to either the operating room or surgical/trauma/neuroscience intensive care unit," she says.

If an intracranial pressure monitor (ICP) is inserted while the patient still is in the ED, monitoring the ICP and performing appropriate interventions to keep ICP under 15 mmHg are of utmost importance, she says.

There is no documented evidence of steroids being helpful in trauma, adds Smith. "Steroids have not been used in traumatic brain injury for many, many years. There is evidence of steroids being harmful," she says.

Assess and document the patient's Glasgow Coma Scale (GCS) score prior to the patient being intubated and sedated, says Smith. "Also try and obtain the GCS from the scene and document. This is extremely important for future decision making if the patient does not improve over time," she says.

Perform a rapid assessment

TBI patients are rapidly assessed for severity of injury, based on precipitating events, initial GCS, general level of consciousness, and appearance, says **William W. Larson**, RN, assistant nurse manager at Hennepin's ED.

Any patient who has a concerning story for mechanism of injury, initial loss of consciousness, altered mental status post-event, nausea, and/or vomiting is placed in the ED's stabilization room, he says. "There, they have the attention of the faculty physician, a senior emergency medicine resident, two nurses, and a supporting cast, which includes a health care assistant, residents, chaplain, and social services," says Larson.

A noncontrast head CT scan is done within 10-15 minutes for critically injured patients, says Larson. "Based on the results, the determination is made as to need for emergent surgical intervention," he says.

Condition can change quickly

Even if patients present as nonemergent, emergency surgery might be required, notes Larson. He gives the example of a patient who falls on the ice, receives a blow to the head, comes to the ED with a headache, but is otherwise alert and oriented.

The patient might suddenly begin vomiting, complain of increased headache pain or visual changes, or even become unresponsive, says Larson. "The patient would then be taken to the CT scanner where an epidural hematoma is discovered requiring emergency neurosurgical intervention," he says. "We call these 'talk-and-deteriorate' patients."

If patients are stable enough to complete their evaluation in the ED, they are placed in monitored beds and are assessed by nursing and physician staff with consult services from neurology and neurosurgery as appropriate, says Larson. "Frequent neurological examinations are completed and documented," says Larson.

If the patient is determined to have a mild TBI and discharge from the ED is a possibility, the patient is monitored for four to six hours and a repeat noncontrast

SOURCES/RESOURCE

For more information on caring for patients with severe traumatic brain injury, contact:

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- **William W. Larson**, RN, Assistant Nurse Manager, Emergency Department, Hennepin County Medical Center, Minneapolis. Phone: (612) 873-5410. E-mail: William.Larson@hcmed.org.
- **Carol Ann Smith**, RN, CNRN, Program Coordinator, Traumatic Brain Injury Center, Hennepin County Medical Center, Minneapolis. Phone: (612) 873-3284. Fax: (612) 904-4515. E-mail: CarolAnn.Smith@hcmed.org.

To access the *Guidelines for the Management of Severe Traumatic Brain Injury*, Third Edition, go to The Brain Trauma Foundation's web site (www.braintrauma.org). After completing a free registration process, the guidelines can be accessed at no charge. Click on "View BTF's Traumatic Brain Injury Guidelines." Or to order a printed copy of the guidelines, click on "Order Materials." The cost is $125 plus $9.50 for shipping.

head CT is obtained prior to discharge, says Larson. If there is any deterioration in the patient's condition, such as a decrease in level of consciousness, new onset vomiting, increase in symptoms such as headache, or any focal change in the neurologic exam, a repeat CT is obtained earlier, he says.

All patients discharged from the ED are sent home with head injury instruction teaching sheets, says Larson. "They are discharged to a responsible adult to observe them, with verbal instructions of when to return to the ED and follow-up instructions," he says.

References

1. Faul M, Wald M, Rutland-Brown W, et al. Using a cost-benefit analysis to estimate outcomes of a clinical treatment guideline: Testing the Brain Trauma Foundation guidelines for the treatment of severe traumatic brain injury. *J Trauma* 2007; 63:1,271-1,278.
2. Hesdorffer DC, Ghajar J. Marked improvement in adherence to traumatic brain injury guidelines in United States trauma centers. *J Trauma* 2007; 63:841-848. ■

Don't make these mistakes when assessing for violence

Always ask follow-up questions

Do you know how to increase the likelihood that a patient will tell you about abuse? During 293 audiotaped interactions with ED staff assessing for intimate partner violence (IPV), 77 patients disclosed experience with IPV.[1] Here are some of the communication pitfalls that researchers found:

• Failing to probe further.

Direct straightforward questions about behaviors, such as "Did this injury happen due to a fight with your partner?" prompted patients to disclose abuse, says **Karin V. Rhodes**, MD, MS, the study's lead author and director of the Division of Health Policy Research in the University of Pennsylvania's Department of Emergency Medicine. Rhodes is a former emergency nurse.

Almost three times as many patients disclosed abuse when ED nurses followed up on nonmedical "clues," such as the patient's mention of stress, and asked even one more question. "Mentioning 'stress' is a common and acceptable way of bringing up a psychosocial issue. Ask what sort of stress she is under and whether there is conflict in her relationship," advises Rhodes.

To increase the chances that a woman will disclose abuse, pause and look directly at her and ask: "Are you in a relationship where you have been hit or threatened?" says Rhodes. Then make sure you add at least one additional question, such as "Have you ever been?" or "Any abusive ex-partners in the picture?" she advises.

• Failing to act when a patient discloses abuse.

Less than one-quarter of the women in the study who revealed abuse were referred to legal or counseling

EXECUTIVE SUMMARY

When ED nurses assessed patients for intimate partner violence (IPV), researchers found that in some cases they didn't ask follow-up questions or failed to act when abuse was disclosed. When asking about IPV:

- Ask follow-up questions, pause and look directly at your patient.
- If abuse is disclosed, involve a social worker or connect the patient to a hotline.
- Interview the patient alone, even if you need to do this in a diagnostic test area or the bathroom.

SOURCES

For more information on assessment of intimate partner violence, contact:

- **Suzanne Murphy**, BSN, RN, SANE, Emergency Department, Hospital of the University of Pennsylvania, Philadelphia. E-mail: Suzanne.Murphy@uphs.upenn.edu.
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services, and providers generally failed to document domestic violence in the medical record. These lapses occurred even though providers were aware they were being taped, and despite annual domestic violence education programs.

"When you do identify someone, let them know you're very glad they told you," says Rhodes. "And then, call your ED social worker or put the patient on the phone to a 24-hour domestic violence hotline. Even if a woman does not need shelter, she may benefit from legal services and group support."

• Asking about abuse in the presence of the woman's partner.

"Always interview the patient alone," says **Suzanne Murphy**, BSN, RN, SANE, an ED nurse at the Hospital of the University of Pennsylvania in Philadelphia. "Every nurse has their own personal style, but I usually act like it is commonplace and ask visitors to step outside for a moment."

If an individual persists in speaking for the patient or hovers nearby, this is a sign that IPV may be occurring, says Murphy. In this case, if you insist on talking to the patient alone, it places the patient at risk, says Murphy. "The abuser will ask what we talked about when he has her alone. If I am unable to speak with the patient alone by asking visitors to leave, I will wait until the time is right," she says. "The visitor may go the restroom or get something to eat."

Another good method is to follow the patient to a diagnostic test such as X-ray or CT, where hospital policy states the visitor can't go, says Murphy. "Helping the patient to the bathroom is another way," she says.

However, triage is the easiest time to do this, says Murphy. "The rooms are small and you can block the visitor from entering in the beginning by saying, 'Just have a seat in the main waiting room, we'll just be a minute.'"

Post resource cards about IPV in the bathroom stalls to ensure that every patient has access to information, recommends Murphy. "This way, every patient gets 'asked' about IPV and can take the information if they feel safe to do so," says Murphy.

At the Hospital of the University of Pennsylvania's ED, a SAFE (sexual assault forensic examiner) Team consists of ED nurses given specialized training to work with victims of abuse, neglect, and violence, says Murphy.

"The first opportunity to ask about potential abuse is at the access point to the emergency department: triage," says Murphy. "The goal is to ask every patient about IPV and have a documented answer in their chart."

Murphy usually says, "Because violence is so prevalent in our lives, I routinely ask all of my patients if they are or recently have been physically or emotionally harmed by someone they love."

When a patient is identified as being in an abusive relationship, the SAFE Team is contacted along with social workers, says Murphy. "Together, we utilize our specialized knowledge and expertise to provide appropriate care and resources," she says. "ED nurses should never feel you have to solve the problem. Our role is to

CNE instructions

Nurses participate in this continuing education program by reading the issue, using the provided references for further research, and studying the questions at the end of the issue.

Participants should select what they believe to be the correct answers, then refer to the list of correct answers to test their knowledge. To clarify confusion surrounding any questions answered incorrectly, please consult the source material.

After completing this semester's activity with the **June** issue, you must complete the evaluation form provided in that issue and return it in the reply envelope provided in order to receive a certificate of completion. When your evaluation is received, a certificate will be mailed to you. ■

COMING IN FUTURE MONTHS

- ■ Get door-to-needle times under 30 minutes
- ■ Prevent dangerous complications in burn patients
- ■ The best ways to assess pain of pediatric patients
- ■ Update on anthrax vaccine for emergency nurses

CNE *objectives/questions*

Participants who complete this activity will be able to:

- **identify** clinical, regulatory, or social issues relating to ED nursing;
- **describe** how those issues affect nursing service delivery;
- **integrate** practical solutions to problems and information into the ED nurse's daily practices, according to advice from nationally recognized experts.

13. Elderly patients with which condition may appear stable at triage but deteriorate during their ED visit?
A. Sepsis
B. Pneumonia
C. Urinary tract infections
D. All of the above

14. Which medication used to treat headache has a common side effect of restlessness known as akathisia?
A. Intravenous diphenhydramine
B. Intravenous dopamine-blocking anti-headache medications
C. Lorazepam
D. None of the above

15. Which has decreased delays for analgesic administration for trauma patients at Dartmouth-Hitchcock Medical Center?
A. ED nurses perform frequent assessments and give additional doses using a protocol.
B. The patient's hemodynamic stability is no longer assessed before pain medications are given.
C. A behavioral health scale is not used to assess pain.
D. Written orders always are obtained before pain medication is given.

16. Which is recommended when caring for patients with traumatic brain injury, according to William W. Larson, RN?
A. Administer steroids if patients are critically ill.
B. Avoid inserting an intracranial pressure monitor while the patient is still in the ED.
C. Do a noncontrast CT scan within 15 minutes.
D. Keep intracranial pressure over 15 mmHG.

Answers: 13. D; 14. B; 15. A; 16. C.