

# Clinical Care Connection



Parkland

Connecting Parkland's clinical staff with the latest information and patient care updates May 2009

## Do you need to attend an ACLS class?

What seems to be a simple yes or no question quickly becomes more complicated.

There are many who can relate to the hidden intricacies of this question. This will walk you through some of the more common decision points about advanced cardiac life support (ACLS) classes.

Once you have decided you need ACLS, the next question you should ask yourself is: one day or two? Do you need the full two day ACLS class or the one day ACLS renewal? In order to qualify for the one day ACLS renewal, you must have had ACLS before. If you have never taken ACLS, you must take the two day course.

Now you need to find a class. All Parkland classes are listed on the Learning Management System (LMS) a.k.a. Parkland's Virtual Campus at [www.phhstraining.org](http://www.phhstraining.org).

Your login is your ID number and the initial password is "parkland." You should change your password after your first log in. Once you are logged in, select "learning activities" then "events calendar" from the menu on the left side of the page. This will bring up a monthly calendar with a list of classes for each day. Typing ACLS into the search window will bring up only those classes.

The two day ACLS and the one day ACLS renewal classes are listed separately on the events calendar, so make sure you select the appropriate class. Once you register, please be sure to attend the class. If you cannot, go into the LMS system and withdraw yourself from the class.



*Only AHA courses, classroom or online, are accepted at Parkland. One easy way to tell if the program is acceptable is that it must contain a skills check-off component.*

These classes fill quickly and there is always a waiting list. If you no-show to a class, that means someone who needed the class could not attend.

There are also ACLS classes offered outside Parkland. If you chose to attend one of these, you need to be sure it is an American Heart Association (AHA) class. Only AHA courses, classroom or online, are accepted at Parkland. One easy way to tell if the program is acceptable is that it must contain a skills check-off component. If it is an online program that does not require you to be checked off on skills, it is not an AHA course.

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## **Classes** *(continued from page 1)*

AHA offers an online version for the didactic content. You must either order the CD from an approved AHA vendor (Channing-Bete, WorldPoint or Laerdal) or have an AHA demo CD that can be activated by an access code from one of the three vendors above. Either way, it takes a few days for you to get access to the CBT. Please make sure that the online class that you take is directly from AHA and not from another source.

There are several sites that say they "follow AHA guidelines or most recent AHA publications" but are not created by AHA. Only certificates from AHA are acceptable for skill check-off and completion card. It then takes several hours to complete the online didactic content. You still have to bring the online completion certificate to a live class to be checked off on skills before receiving your ACLS completion card. If you choose to be checked off on skills at a Parkland class, you must register via the LMS.

Hopefully this helps answer some of your questions and makes it a little easier for you to navigate the system to complete ACLS. If you need additional assistance, please call Leadership & Organizational Development at ext. 28535.

## *Patient Education Update*

### **Joint Commission goals for patient education**

Last month we looked at what the Joint Commission had to say about patient education. This month we'll see a listing of goals and guidelines distilled from the Joint Commission Standard. These lists should be helpful in organizing your thoughts and behaviors relating to teaching your patients. These goals and guidelines have been excerpted from "Patient Teaching Tips" by P. Colston, Clinical Educator, ERC. UTMB, 2001. [www.eurasia/health.org/attaches/81757/412-e.ppt](http://www.eurasia/health.org/attaches/81757/412-e.ppt)

#### **Goals for patient education:**

- Giving information
- Providing support
- Counseling
- Helping people see things clearly
- Correcting misconceptions
- Helping people see their role in their care and taking responsibility for it

#### **Joint Commission guidelines:**

- Give patients information that will enhance their skills on developing behaviors to help them get well and stay well
- Offer education when appropriate and include significant others
- Begin education with an assessment and address the identified needs
- Educate patients regarding their medications
- Provide education on the safe and effective use of equipment
- Address food/diet appropriate to illness and individual food/drug interactions
- Inform patients leaving a facility how to obtain follow-up care
- Give information to the organization responsible for continuing care of the patient

## *Med Surg Memos*

### **Acute Renal Failure**

Acute Renal Failure (ARF) is an abrupt or rapid decline in renal function that results in elevated blood urea nitrogen (BUN) and serum creatinine levels. This can occur with or without a decrease in urine output over hours or days. ARF has an abrupt onset and is often reversible with prompt treatment. More than 5 percent of hospitalized patients develop ARF. There are multiple causes of acute renal failure that can be classified into three categories: Prerenal, Intrarenal (Intrinsic) and Postrenal. Most commonly ARF is due to ischemia and nephrotoxins.

- Prerenal ARF is an abnormal decrease in kidney perfusion which results in decreased glomerular filtration and azotemia
  - o Hypovolemia – dehydration, hemorrhage
  - o Low cardiac output – Congestive Heart Failure (CHF)
  - o Altered vascular resistance (vasodilation) - Sepsis
- Intrarenal ARF occurs when there is direct damage to functional kidney tissue
  - o Acute tubular necrosis – most common cause
    - Ischemic – when renal blood flow is decreased by 30-50 percent
    - Nephrotoxic – due to drugs, radiologic contrast
  - o Glomerular injury – Hypertension, Glomerulonephritis
  - o Interstitial – acute pyelonephritis
- Postrenal ARF is any condition that prevents urine excretions from the kidneys
  - o Ureteral Obstruction – kidney stones, tumors
  - o Urethral Obstruction – prostatic hypertrophy, catheters, strictures

ARF is often preventable. Efforts should be made to prevent development of ARF in high risk patients. Risk factors include Diabetes Mellitus, Hypertension, CHF, nephrotoxic agents and advanced age. Treatment includes identifying and correcting the underlying problem before there is further damage. It is important that renal perfusion is restored quickly by intervening with adequate hydration, medication and/or dialysis. Correction of factors contributing to ARF will reduce the morbidity and mortality associated with this disorder.

## Regulatory Roundup

### Pediatric visitor medical assistance: What should we do to help?

At Parkland we encounter children running, playing on the escalators or in front of a door, climbing on furniture in the outpatient clinics, waiting rooms and inpatient units.

If one of these children were injured, what would you do?

Your Risk Management Analysts have written a procedure that will guide you in your decision making should a visiting child be injured in your area.

The Pediatric Visitor Medical Assistance procedure is on the intranet with the Risk Management policies (#12-11) and will provide the answers you need to mitigate the risk to Parkland, your staff and most importantly the child. There are only two choices to make.

- If the medical problem appears to constitute an emergency condition or the patient or family is requesting medical care, the initial responder should initiate measures to transport the child to the Emergency Department
- Upon arrival to the ED, the pediatric visitor should be triaged according to Parkland ED Triage Guidelines. We have an agreement with Children's Medical Center but the child must first be given an emergency medical screen in the ED before being transported to Children's in order to prevent an EMTALA violation
- If the medical problem does not constitute an emergency and if the family is not requesting emergency care, the patient/family may follow up with their community care provider of choice. The clinic or inpatient staff may offer appropriate non pharmacological items such as an antiseptic wipe, bandage or ice pack to the adult responsible for the child

Please help mitigate the risk for our young visitors, staff and Parkland by providing the appropriate medical assistance. If you have any questions, please contact your Risk Analyst - either Jane Rasley, ext. 20651, or Joyce Thompson, ext. 20195.

*Are you Parkland Nurse with a current NRP card? If so, you are eligible for a free key code to complete the CPR Renewal Exam online at [www.onlineaha.org](http://www.onlineaha.org). Call the Nursing Education Office at ext. 28535 to receive your free key code. Once you have completed the online portion, sign up for the skills check-off through the LMS. We have a 7:30 and 10:30 a.m. skills check-off twice each month. Bring your certificate of exam completion to your skills check-off.*



### UPDATE

Fall Prevention Update: Hill-Rom side rail extenders

**Occasionally patients placed on specialty mattresses, such as a First Step, may lose some of the height protection of the side rail. Parkland has stocked side rail extenders that attach to the Hill-Rom beds, including the Versacare beds. Hill-Rom side rail extenders may be ordered from Patient Rental Equipment/Sterile Processing. The order number is SP 5167735.**

### UAP Corner

#### Mumps

Mumps, also known as parotitis, was once a common childhood disease caused by a virus. Transmission only occurs in humans and is spread through droplets of saliva when coughing, sneezing or laughing. Mumps can also be spread by direct contact when picking up a tissue, drinking out of the same glass, eating and kissing.

Signs and symptoms take 12 to 25 days to develop. The most contagious period is six days before the symptoms occur until nine days after symptoms start. The first symptoms usually are flu-like symptoms (headache, loss of energy) and a fever up to 103° F. The parotid gland on one side of the face begins to swell and ache. This swelling may be unilateral or bilateral. Swelling increases over three days worsening with swallowing, talking, chewing or drinking. Other glands in the jaw may also be affected. Symptoms may be mild in some people with 20-30 percent being asymptomatic.

Complications may include encephalitis, meningitis, deafness on the affected side, pancreatitis, oophoritis (in the female) or orchitis in the adolescent and adult males. It is important to call your doctor to confirm the presence of mumps as well as to monitor progress for developing complications. Appropriate interventions are monitoring temperature, warm or cold packs, soft bland diet, plenty of fluids and non-aspirin medications. Antibiotics are not usually prescribed.

After recovery from mumps, one has a lifetime immunity. A second infection is very rare. Swelling of the salivary glands can also be caused by other infections. The most common method of immunity occurs with vaccination either as a single dose or included with the MMR. The vaccination is a live attenuated virus which results in 80 percent effectiveness with one dose and 90 percent effectiveness with two doses.

## Outpatient Observations

### Allergies



Allergies cost the U.S. \$3.4 billion each year. Side effects may reduce worker productivity and quality of life, only adding to the bill. Allergies may complicate asthma, sinusitis, otitis media with effusion and upper respiratory tract infection.

Characteristic signs of allergies are nasal congestion, rhinorrhea, postnasal drip, nasal itching and sneezing. Symptoms can be seasonal (spring: tree pollen, late spring and summer: grasses, fall: weeds) or perennial caused by house dust mites, pet dander and molds. Perfumes, strong odors or passive smoke may make any allergy worse.

Sensitization is the first phase, when the allergen comes in contact with CD4+ T cells which become activated and stimulate B cells into IgE producing plasma cells. The intermediate phase is when the IgE antibodies bind to mast cells and basophils releasing histamine and tryptase. This stimulates leukotriene and prostaglandin production, which cause typical symptoms by increasing glandular secretion, venous engorgement and vascular permeability. The late phase response involves the inflammatory cells and occurs 4-12 hours later. Repeated events take less allergen to give the same effects, known as priming.

Evaluation involves identifying the triggers by taking a detailed environmental history, family history and a physical examination for signs of atopic dermatitis, asthma or other comorbidities. Careful allergy skin testing showing positive reactions compared with the patient's history can indicate the individual environmental control measures needed. Often this may require reducing exposure to pollens, reducing dust and pet dander at home.

Medications like diphenhydramine may cause sedation, increasing the use of second generation H1-receptor antagonists like fexofenadine (Allegra), loratadine (Alavert, Claritin), cetirizine (Zyrtec) and azelastine (Astelin, Asterpro, Optivan) nasal spray. Topical intranasal corticosteroids are used for moderate to severe rhinitis and block histamine release from mast cells when used prior to allergen exposure. Decongestants can be used for temporary relief. Leukotriene receptor antagonists, montelukast (Singulair) and zafirlukast (Accolate) are less commonly used. Immunotherapy, involving shots of dilute solutions of the allergens, weekly for several years may produce long-lasting remission.

Reference: First Exposure: Internal Medicine. Ambulatory Medicine. Andrew R. Hoellein et al. Lange (2007)

## Laboratory Scope

### Pathology Quality Program

The Pathology Quality Program is a comprehensive program based on the Clinical and Laboratory Standards Institute guidelines. Eleven quality essentials describe the quality program for all sections of the Pathology laboratories including inpatient, outpatient and satellite services and point-of-care testing (see Figure 1).

The Pathology quality team is instrumental in developing and implementing this program and receives guidance from the Pathology Quality Steering Committee (PQSC). The Pathology goals, quality plan, regulatory issues and performance improvement projects are discussed at the PQSC and then reported to the Pathology Performance Improvement Committee. Periodic reports are presented to other department committees such as the Emergency Department and Medicine Services. The Laboratory Director reports improvement efforts to the Parkland Quality Improvement Council. The Pathology Clinical Advisory Committee serves as the organizational line of communication between clinical staff and Pathology. Pathology coordinates patient safety initiatives with the hospital Performance Improvement and Clinical Safety departments.

Our quality assessments encompass monitoring key indicators of quality, evaluating proficiency testing and adverse events and complaints, auditing laboratory processes and medical record charts (tracer methodology) and conducting satisfaction surveys. Laboratory quality meetings provide a forum for evaluating these quality assessments. Medical Directors, Laboratory management, staff, quality liaisons and analysts all participate in making decisions that affect the quality and performance of the laboratory. Performance improvement projects using Lean/Six Sigma and Plan-Do-Check-Act methodologies are initiated from these evaluations.

Our Quality Awareness program focuses on enhancing communication, developing leadership skills, building relationships and celebrating successes. Examples include Town Hall gatherings, the supervisors forum, quality liaison program, newsletter and a quality fair for Pathology and hospital staff. Highlights are posted on the "Around Pathology" bulletin board. An ambassador program facilitates communication and joint problem solving efforts between Pathology and unit staff.

Figure 1. Pathology Quality Program



## Pain Points

### Pain Management in the Elderly

Elderly patients with pain are a special population often understudied and undertreated. Despite the fact that the prevalence of pain increases with age, the use of analgesic medication declines.<sup>1</sup> The reasons for under-treatment of pain are many, and may be due to misconceptions and misunderstandings by the persons involved.

Consider these pain management barriers for the elderly:

- Under-reporting of pain by patients due to accepting it as a normal consequence of aging
- Sensory impairments hindering the patient's ability to communicate the degree and source of pain
- Public and clinician attitudes about aging and pain
- Relative lack of pain management education for staff in long-term care facilities compared to acute care settings
- Cognitive impairment interfering with the elderly patient's ability to complete pain assessment tools and adhere to prescribed treatment regimens
- Reluctance to prescribe opioids due to adverse effects, such as confusion or delirium

Assessment of function is critical in assessing pain in the elderly. Their ability to perform activities of daily living impacts their independence and ability to care for a spouse or loved one.

Depression often coexists with chronic pain leading to decreased socialization and increased risk of cognitive decline.<sup>2</sup>

The etiology of pain in the elderly often stems from one of three causes:

- Co-existing medical illness
- Result of aging (spinal stenosis or osteoarthritis)
- Neuropsychiatric disorder

Treatments should be tailored to the individual and titrated gradually to meet functional goals.

Both pharmacologic and non-pharmacologic methods for treating pain should be used in conjunction.

Test your knowledge of pain pharmacology in the four examples below.<sup>3</sup>

1. Jim is a 70 year old with prostate cancer with metastases to the bone. He reports a pain rating of eight (0-10 scale). He currently is taking Lorcet 10/650 two tabs every four hours. What is your first recommendation?
  - a) Increase the Lorcet
  - b) Change to oral morphine or oral hydromorphone
  - c) Add an antidepressant
  - d) Add an NSAID
2. If Jim's pain is still not relieved, what would be your next recommendation?
  - a) Add an adjuvant medication
  - b) Start him on Celebrex
  - c) Increase the dosage of the opioid
  - d) Use non-pharmacologic intervention
3. Which treatment approach is best for severe, chronic cancer pain?
  - a) Strong opioids administered on a PRN basis
  - b) Use of short-acting analgesics on a routine schedule and use of long-acting analgesics for breakthrough pain
  - c) Avoidance of opioids until the last weeks of life and reliance only on non-opioids
  - d) Use of long-acting analgesics on a routine schedule with short-acting medications on a PRN basis for breakthrough pain
4. Mary, a patient with diabetes, is recovering from an amputation of her right leg. She is on a long-acting opioid and recently started to report pain ratings of 5-6 in the stump area. She describes her pain as a sharp, burning sensation. What would you suggest to the physician for Mary's pain?
  - a) Increase the dose of the long-acting opioid
  - b) Add acetaminophen
  - c) Add gabapentin
  - d) Add ibuprofen

Answers: 1-B, 2-B, 3-D, 4-C

#### References:

1. Sorkin BA, Rudy TE, Hanlon RB, Turk DC. Chronic pain in older and young patients: differences appear less important than similarities. *J Gerontol* 1990;45(2):64-68.
2. PainEDU.org Manual, 3rd edition, 2007.
3. Kelly AM. Geriatric pain assessment: self-directed learning module. *American Society of Pain Management Nursing*, 2003.

*Treatments should be tailored to the individual and titrated gradually to meet functional goals. Both pharmacologic and non-pharmacologic methods for treating pain should be used in conjunction.*

*Not all patches that contain metal have a label warning about the risk of burns during an MRI. Hospitalized patients being discharged on a transdermal medication should be educated to remove the patch temporarily when undergoing an MRI.*



*Pharmacy Forum*

**Medicated patches can cause burns during MRI**

The Federal Drug Administration (FDA) issued a public health advisory regarding transdermal patches during magnetic resonance imaging (MRI). In 2004, an FDA Advise-ERR noted that some patches are formulated with an aluminized backing that could cause injury to the patient if worn during an MRI. Patches may contain metal in a layer that is not visible or in contact with the skin. An MRI requires the use of radiofrequency (RF) pulses to create the magnetic resonance signal. A concentration of electrical currents sufficient to cause excessive heating or tissue damage is possible when the patch is within the RF field. Patients have reported skin burns at the patch site when wearing a patch during MRI. Not all patches that contain metal have a label warning about the risk of burns during an MRI. Hospitalized patients being discharged on a transdermal medication should be educated to remove the patch temporarily when undergoing an MRI and how to reapply the patch after the procedure.

Taken from the ISMP Medication Safety Alert March 12, 2009, Volume 14 Issue 5

**P&T Decisions:**

|  |   |
|--|---|
| <b>Anergy Panel for Routine Tuberculin Testing</b> | <b>Pharmacy will no longer send Control Antigens for PPD placement. Pharmacy will autoexchange orders and send PPD only. Education will take place prior to implementation.</b>   |
| <b>Levalbuterol (Xopenex®)</b>                     | <b>To remain nonformulary an emergency supply will be kept in the ED satellite pharmacy for patients with documented albuterol 'Intolerance' with prior Xopenex 'tolerance' for emergent use. A NF will still be completed. All cases of intolerance/allergy histories will be reported to Bonnie Dierschke, Asthma Pharmacist, for review.</b> |
| <b>Levetiracetam (Keppra XR®)</b>                  | <b>To remain nonformulary</b>   |
| <b>Colchicine IV</b>                               | <b>No longer manufactured. Remove from Formulary</b>  |
| <b>Collagenase (Santyl®)</b>                       | <b>Remove restriction</b>   |
| <b>Papain and Urea (Accuzyme®)</b>                 | <b>No longer manufactured. Remove from Formulary</b>  |

The online Parkland Drug Formulary can be found at <http://www.crlonline.com>  
 Target date for implementation: May 14, 2009

## Critical Care Vital Signs

### Central Line Infection Prevention (CLIP)

#### Problem Identified: Central Line Associated Bloodstream Infections (CLABIs)

"The Centers for Medicare and Medicaid Services (CMS) will no longer pay health care organizations for the extra costs associated with vascular catheter-associated infections"<sup>2</sup>. "The attributable cost per infection is an estimated \$34,508 to \$56,000 and the annual cost of caring for patients with Central Line-associated BSIs ranges from \$296 million to \$2.3 billion"<sup>1</sup>.

#### Parkland's Solution: Implementation of a Central Line Bundle (kit containing all necessary items for insertion) and Central Line Checklist

Implementation of these evidence-based guidelines has already begun in Parkland's critical care areas for non-emergent central venous catheters as well as peripherally inserted central catheter (PICC) lines. The remaining areas will carry out this practice in the near future.

**Purpose:** To help health care professionals protect patients from catheter-related blood stream infections and fulfill a Joint Commission approved National Patient Safety goal requirement for 2009 related to prevention of CLABIs (NPSG.07.04.01).

The five key components included in the central line checklist are:

- Hand hygiene
- Maximal barrier precautions
- Chlorhexidine skin antisepsis
- Optimal catheter site selection, with preference towards subclavian veins
- Daily review of necessity with prompt removal of unnecessary lines

You play an important role in the prevention of central line associated blood stream infections.

1. The Joint Commission "Perspectives on Patient Safety" March 2009 Vol 9 Issue 3

2. <http://www.jointcommission.org>



## Performance Improvement & Patient Safety Stories

### Fall Team Update

In 2005, the Pennsylvania Patient Safety Advisory Reporting System issued a patient advisory about the potential dangers of the lack of standardization of color-coded armbands. Since that time, more than 25 states have standardized armband colors. Last September the Texas Hospital Association began actively spearheading a voluntary, state-wide initiative to standardize armband colors, choosing YELLOW for falls.

The Parkland Fall Team has joined this movement and is in the process of updating fall risk supplies. Armbands, stickers and the signs at the patient's bedside and outside the patient's room door were changed to yellow in April.

### FAQs

#### Q. Why was yellow selected?

A. Research of other industries indicates that yellow implies "caution!" Think of traffic lights; a yellow light cautions that the light is about to turn red, and drivers should either clear the intersection quickly or prepare to stop. The American National Standards Institute uses yellow to communicate "tripping or falling hazards." It fits well in health care too when associated with a fall risk. Caregivers need to know to be on alert and use caution with a person who has history of previous falls, dizziness or balance problems, tires easily or is confused about their current surroundings.

#### Q. Why use an alert band for fall risk?

A. According to the Centers for Disease Control and Prevention (CDC), falls are an area of great concern in the aging population:

- More than a third of adults age 65 or older fall each year
- Of those who fall, 20-30 percent suffer moderate to severe injuries that reduce mobility and independence and increase the risk of premature death
- The total cost of all fall injuries for people age 65 or older in 1994 was \$27.3 billion (in current dollars)
- The number of hip fractures is expected to exceed 500,000 by the year 2040. As the aging population enters the acute-care environment, we must consider the risk that is present and do everything possible to communicate that to hospital staff

#### Q. Is it only older adults who fall at Parkland?

A. No. Patients of all ages with risk factors fall. Risk factors include a recent fall, certain medications, substance abuse, alcohol abuse and altered mental state. Patients of any age with risk factors should be placed on the Fall Protocol as determined by the Morse Scale score and hourly rounds should be completed for those patients per protocol.

#### For more information call:

Pheba Abraham, ext. 20484

Nancy Schierding, ext. 28577

Dr. Vivienne Roche, ext. 89012

*Employee of the Month is an award open for nominations from every employee at Parkland. Simply go to the home page of Parkland's intranet under the "Spotlight" section. Click on "Employee of the Month form."*



Employees of the Month (from Left) Kevin Stuteville, Peggy Bartholomew, Cornelius Torrence, Mary Stern and Nga Nguyen pose with Dr. Ron J. Anderson, Parkland's President & Chief Executive Officer.

### *Leadership Lingo*

#### **Employee of the Month**

When was the last time you received an award for work performance?

Think back to your childhood for a moment when you would turn yourself inside out just to hear your parent or teacher say, "Good job!" or, "That's great!" Remember that sense of pride in a job well done? Even though we're not children anymore, it still feels great to get a pat on the back and know that someone notices the pride we take in our work.

Have you ever received an award from one of your peers? Remember how powerful that was and how wonderful it made you feel? You have an opportunity to share that same experience with any employee you deem deserving of the honor. Employee of the Month is an award open for nominations from every employee at Parkland. You can nominate peer to peer, someone you work with every day in your own department. You can nominate your manager or director. You can nominate a doctor, Physician's Assistant or Nurse Practitioner. You can even nominate someone from a different area or department; someone you see doing excellent things every day. The point is: nominate. Take the time to look around and formally thank a fellow employee. We could all use a pat on the back.

Simply go to the home page of Parkland's intranet under the "Spotlight" section. Click on "Employee of the Month form." Now all you have to do is fill out the form, tell us how wonderful your nominee is and submit it. Each month we have several winners. All receive a plaque and a gift card. They also receive that same warm fuzzy feeling you had when you received your award.

### *Nutrition Consult*

#### **"SpikeRight" tubing for Nestle enteral feeding products**

In an effort to improve safety with tube feeding, Nestle Nutrition is using "SpikeRight," an enteral specific port for closed tube-feeding containers designed to reduce the risk of IV misconnection. The SpikeRight port uses a threaded design that connects with specifically designed screw-top enteral spike sets to reduce the risk of misconnection with intravenous equipment. The new port is purple, indicating it to be a nutritional port and not an IV access.

Currently the enteral products that will need the new SpikeRight tubing are Crucial and Peptamen only, although Nestle plans to change over all of its products in the coming year.

MRD# for ordering SpikeRight: 13892

MRD# for SpikeRight with flush bag: 13894



## Occupational Therapists Achieve Advanced Certifications

Each April, Occupational Therapists, Occupational Therapy Assistants and students celebrate the importance of Occupational Therapy (OT). Occupational Therapists complete a Masters or Doctoral level degree. OT assistants complete a two year Associate degree from an accredited college.

Occupational Therapists receive specialized training in assessment and treatment with a focus on restoration of function to help patients maintain and rebuild their independence and participate in everyday activities that bring meaning to their lives.

The OT department at Parkland has a staff of 27 OT's, one COTA and seven support/technical staff. The OT staff treats patients of all ages in specialty areas such as neurology, burn, trauma, UE orthopedics, hands, neonatology, lymphedema and a specialized diabetic foot program.

OT has two Certified Hand Therapists, Steve Adams and Adair Hall. The CHT is required to pass a comprehensive test of clinical skills and demonstrate continued professional development to maintain certification. OT has four therapists who have completed requirements for the CLT-Certified Lymphedema Therapist. Velmaris Rodriquez-Ojeda, Julie Cameron, Marie Henley and Lisa Shrauner completed intensive training which includes manual lymph drainage, compression therapy, exercises and skin care for the treatment of Lymphedema.

### Notes from Nursing Administration

## The Six Essential Elements of Pressure Ulcer Prevention

#2: Reassess Risk Daily

#3: Inspect Skin Daily

You may remember in the previous newsletter we discussed conducting a pressure ulcer admission assessment as the first essential element in preventing pressure ulcers. A pressure ulcer assessment includes both an evaluation of the patient's risk for developing a pressure ulcer and the identification of any existing pressure ulcers.

Performing a daily risk assessment and skin inspection are elements number two and three for the prevention of pressure ulcers. During a hospital stay patients may develop changes in mobility, incontinence or nutritional status. These changes may significantly increase their risk for pressure ulcer development and a daily risk assessment and skin inspection allows us to quickly identify a new risk factor and intervene before a pressure ulcer develops.

At Parkland risk assessment is performed using the Braden Scale<sup>1</sup> which assesses sensory perception, moisture, activity, mobility, nutrition, friction and shearing. Assessments are documented once per patient day or more frequently if the patient's condition warrants. Daily assessments are conducted on all patients except low-risk obstetrical and observation patients. The Braden score is documented on the appropriate form in the medical record.

Inspection of the patient's skin is also performed once or more each patient day. Skin inspection should include inspection of all skin surfaces from head to toe. Special attention should be given to the sacrum, back, buttocks, heels, elbows and areas subject to device-related pressure.

If a pressure ulcer is noted during daily skin inspection, the following actions are initiated:

- Document the location, size and stage<sup>2</sup>, if known, in the medical record
- Take appropriate nursing action to decrease moisture, friction and shearing and to improve activity, mobility and nutrition
- Collaborate with the provider to determine if a consult to the Wound and Ostomy Care Nurses is indicated
- Enter a report into the Patient Safety Net

Next month: Element # 4: Manage Moisture: Keep the Patient Dry and Moisturize Skin

\*Braden Scale may be found by reviewing Nursing 27-03, Pressure Ulcers: Assessment, Prevention and Management, Appendix A

\*\* Staging information may be found by reviewing Nursing 27-03, Pressure Ulcers: Assessment, Prevention and Management, Appendix B

### Chief Quality Officer Comes to Parkland

Peter Hoffmann, MD, has been named Parkland's Senior Vice President and Chief Quality Officer. He began April 27.

"Dr. Hoffmann brings to Parkland a wealth of experience in quality and clinical effectiveness work, as well as intimate understanding of how information technology can be harnessed to inform medical practice and opportunities for improvement," said Jay Shannon, MD, Senior Vice President and Chief Medical Officer for Parkland. "His experience with academic medical centers and his clinical insight into what matters in health quality metrics will be invaluable as Parkland reorganizes its approach to quality and safety."

In his new role Dr. Hoffmann will oversee staff and medical leadership in the areas of quality improvement, patient safety and risk prevention as well as infection control, regulatory readiness and utilization management.

## *Respiratory Tidings*

### **The Use of Non-Invasive Ventilation**

Non-invasive ventilation (NIV) is a technique that provides alveolar ventilation to decrease a patient's work of breathing (select patients) without the placement of an artificial airway. The term NIV applies to patients supported by Bipap or mask ventilation delivered through an ICU mechanical ventilator. For most patients, NIV is used as a "bridge" to avoid endotracheal intubation while the underlying cause of respiratory failure is treated. Medical literature has demonstrated that in select patients NIV decreases days in the intensive care unit, overall hospital length of stay and nosocomial infections by decreasing the need for endotracheal intubation. NIV is now considered first line therapy for patients suffering from acute exacerbations of chronic obstructive pulmonary disease or congestive heart failure. It is also widely accepted as a method to assist ventilation in immunocompromised patients, patients with neuromuscular disease and for patients dealing with end of life issues. The common strategies, indications, contraindications, predictors and clinical tips are listed below:

*Non-Invasive ventilation is also widely accepted as a method to assist ventilation in patients with neuromuscular disease and patients dealing with end of life issues.*

#### **POSSIBLE INDICATIONS FOR NIV**

- \*COPD exacerbation- All patients presenting with moderate to severe respiratory distress (RR >25, PH < 7.35 and accessory muscle usage, paradoxical breathing pattern, increased oxygen requirement) should be considered for an early trial of NIV with minimum levels of PEEP and PS < 20 cm H<sub>2</sub>O.
- \*CHF - All patients presenting with moderate to severe exacerbation (RR >25, PH < 7.35 and accessory muscle usage, paradoxical breathing pattern, increased oxygen requirement) should be considered for an early trial of NIV with increased levels of PEEP (starting at 8 – 10 cm H<sub>2</sub>O) and pressure support (optional)
- Asthma - All patients presenting with moderate to severe exacerbation (RR >25, PH < 7.35 and accessory muscle usage) may be considered for an early trial of NIV with minimum levels of PEEP and pressure support < 20 cm H<sub>2</sub>O
- \*OSA - Typically placed on a CPAP level without pressure support
- Restrictive disorders - Typically placed on CPAP to increase their functional residual capacity and pressure support to unload muscle work
- Apnea
- Inability to protect airway
- Hemodynamic instability
- Cardiac Arrest
- Vomiting
- Combative or Obtunded Patient

#### **PREDICTORS OF SUCCESS FOR NIV**

- Improvement in dyspnea
- Improvement in PH
- Decreased PaCO<sub>2</sub>
- Decreased oxygen requirement
- Reduction in respiratory rate and heart rate

#### **PREDICTORS OF FAILURE FOR NIV**

- Ventilator dysynchrony
- Large mask leak
- No improvement in ABG within one or two hours
- WOB not improved within 30-60 minutes, especially if paradoxical breathing patterns persist

#### **CLINICAL TIPS**

- The above predictors of success should occur within 30 minutes to two hours of initiation of NIV otherwise the patient is not responding
- Patients on NIV should always have a small mask leak (7-25 l/m) to prevent skin breakdown secondary to elevated mask pressure (leaks should be directed away from the eyes)
- Anxious patients may require some sedation.
- Every effort is made to keep pressure levels < 20 cm H<sub>2</sub>O to prevent gastric distension
- Patient will be started on low pressures to maintain patient comfort and gradually increased to relieve dyspnea and/or improve oxygenation

*\*Strong evidence from RCT supports use*

## May 4-8 is Nurses Week

How do you view your profession and how does the rest of the world view it along with you? Find out at the Image of Nursing Seminar, 8 a.m. to 4:30 p.m., May 4 in room D1.602 at UT Southwestern. Registration begins at 7:30 a.m. and a continental breakfast will be served. Register at [www.phhstraining.org](http://www.phhstraining.org). This seminar is worth 7.0 contact hours.

| Date             | Time   | Event   | Location                                      |
|------------------|--|---|---|
| Monday, May 4    | 8 a.m.-4:30 p.m.                             | Nursing Education Day<br>Image of Nursing                   | UT Southwestern Medical<br>School Room D1.602 |
| Tuesday, May 5   | 6-9 a.m.<br>11 a.m.-1:30 p.m.<br>3:30-5 p.m. | Night shift staff<br>Day shift staff<br>Evening shift staff | MacGregor W. Day<br>Auditorium                |
| Wednesday, May 6 | 6-9 a.m.<br>11 a.m.-1:30 p.m.<br>3:30-5 p.m. | Night shift staff<br>Day shift staff<br>Evening shift staff | MacGregor W. Day<br>Auditorium                |
| Thursday, May 7  | 6-9 a.m.<br>11 a.m.-1:30 p.m.<br>3:30-5 p.m. | Night shift staff<br>Day shift staff<br>Evening shift staff | MacGregor W. Day<br>Auditorium                |
| Friday, May 8    | 6-9 a.m.<br>11 a.m.-1:30 p.m.<br>3:30-5 p.m. | Night shift staff<br>Day shift staff<br>Evening shift staff | MacGregor W. Day<br>Auditorium                |

## The Infection Connection Shingles

Anyone who has had chickenpox may develop shingles. The virus remains dormant in the dorsal root ganglia near the spinal cord and may re-appear years later. The triggers for reactivation of VZV have not been identified. Shingles (often referred to as "herpes zoster") occurs most commonly in people 50 years old or older or those who are immunocompromised. There is typically a prodrome that includes headache, photophobia, malaise and sometimes fever. Abnormal skin sensations may include itching or tingling of the skin, altered sensitivity to touch and a varying degree of pain. This is typically followed by the appearance of a blister-like rash. The rash is typically localized to one small area on one side of the body (usually in one to two adjacent dermatomes), often on the face or trunk. Other symptoms may include fever, headache, chills and upset stomach.



A common complication, occurring in 10-18 percent of patients with Shingles, is postherpetic neuralgia (PHN). PHN is a chronic and often debilitating condition that can last months or years. Another frequent complication is eye involvement, occurring in 10-25 percent of cases, which may result in prolonged pain, facial scarring and vision loss. A rare complication is Ramsay Hunt syndrome, which is a peripheral facial nerve palsy along with lesions in the

ear, hard palate or tongue. Hospitalization is required for about three percent of persons with Shingles. Prompt treatment with oral antiviral agents decreases the severity and duration of acute pain. Corticosteroids, analgesics or other medications may also be required.

Among immunocompromised persons, widespread dissemination of the rash may occur in up to 37 percent of Shingles cases without antiviral treatment. Cutaneous dissemination is not life threatening, but signals viremia that may cause pneumonia, hepatitis, encephalitis and disseminated intravascular coagulopathy. The risk of neurologic complications is also increased in immunocompromised persons.

Shingles lesions contain high concentrations of VZV that may cause chickenpox in exposed susceptible persons. Shingles has not been associated with epidemics. Localized Shingles is less contagious than chickenpox and requires only standard precautions. Persons with localized Shingles are less likely to transmit to VZV if the lesions are covered. Disseminated Shingles requires airborne plus contact precautions for the duration of illness. Immunocompromised persons with localized Shingles should be closely observed for dissemination.

A Shingles vaccine is now available. It is recommended for all persons age 60 or older who have no contraindications. A booster dose is not indicated. It is not necessary to screen the recipient for history of chickenpox or varicella antibodies.

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### *The Safety Stop*

#### **Employee Injury Prevention**

A leading cause of Parkland's employee workplace injuries are related to patient handling and transport. Injuries to nurses while patient handling or transporting is the number two cause of serious employee injury at Parkland.

Data from the Bureau of Labor Statistics show a high number of strains and sprains reported by nursing staff. The back is the body part that is most frequently injured and the patient is the major source of injury for these same occupational groups.

Nurse injuries are six times as frequent as any other single occupational group. The vast majority of these injuries were related to patient transfer and repositioning tasks. Furthermore, patient handling tasks are unpredictable; the amount of assistance a patient can offer at any point in time will vary making the task somewhat different each time it is performed.

- Always use caution when repositioning patients
- Proper and optimum use of bed control adjustments should also be used to minimize the need for repositioning. Proper bed adjustments can minimize a patient sliding down in the bed
- When a patient slides down to the foot end of the bed and repositioning is required, bed controls and features should be evaluated and utilized to the full extent possible to maximize advantage to the caregiver during these activities. Where possible, beds should be raised to the height of the caregiver's elbow. When beds have a capability of assuming the Trendelenburg position (where the head of the bed is lower than the foot of the bed), this position should be used to facilitate the repositioning process
- The use of a mechanical lift should be considered when a major bed repositioning is required
- All repositioning in beds should be performed by at least two caregivers
- Where patients are capable of assisting, they should be involved in the repositioning process
- Immediately report all injuries and complete an Injury On-Duty /Occupational Exposure Report
- Occupational Health can be reached at ext. 21234 and HR/Workers Compensation by fax at ext. 22715 within 24 hours
- See Parkland Policy 10-14, Injury On Duty/Occupational Exposure for more information

**Did You Know?** Physically fit staff members may be exposed to risk at a greater level; co-workers are four times more likely to ask stronger peers for help. Always use caution and proper lifting techniques or utilize lifting equipment.