Timepiece

for Good Samaritan Nurses

SPRING 2009

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Good Samaritan Hospital

MedStar Health

Shirley A. Roth, RN, MSA, CHE

OUR JOURNEY TOWARD EXCELLENCE

Becoming Transformational Leaders

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Vice President for Patient Care Services/CNO

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On the cover: Technology Task Force

Front Row (left to right):
Debbie Wagner, Nursing Ed; Karen Droter, PACU; Alice Slavik-ICU/CCU, Kathy Jones, Rehab; Carolyn Fischer, ED; Elizabeth John, 5E.

Back Row (left to right):
Mary Humeniuk-Smith, O'Neill 3; Althea Bailey, HCU; Wendi Butcher, 4E; Robin Craycraft, Quality.

Not Pictured:
Marilyn Booker, Director Nursing Informatics; CeCi Pukacz, PCM SSU.

This summer we will "go live" with our implementation of the MedConnect project. As you are aware, it is the first phase towards computerizing our patients' medical record. It includes clinical documentation for nursing and respiratory therapy, as well as bar coded medication administration and positive patient identification for specimen collection. I want to share with you how this project supports our journey towards excellence and supports our Vision: *Trusted Nurses, Caring for Patients and Others, While Advancing Practice.*

> This work will definitely make a great impact on patient outcomes and nursing practice. This is a great example of how nurses act as transformational leaders.

Nurses from all MedStar Health hospitals met regularly to discuss how we currently manage the care of our patients, and agreed to standardize nursing practice throughout the system. This is a phenomenal achievement. It did not matter if these nurses worked in a university based hospital or a community hospital, in Baltimore or Washington. These nurses reviewed their current hospital practices, reviewed the literature and the published research. They then made their decisions for the MedConnect project based on objective criteria. Changes to current practice were made in every clinical practice setting based on their work.

For example, in our own hospital, we now assess a patient's risk for falls based on the Hendricks II model. This work will definitely make a great impact on patient outcomes and nursing practice. This is a great example of how nurses act as transformational leaders.

The process used to build this computerized clinical documentation system was designed so nurses would use their clinical expertise and

leadership skills to assure the practices they designed created a culture of patient safety and quality.

According to leadership theorist James McGregor Burns, to effectively change practice we need to be "transformational leaders". This leadership style is about implementing new ideas. We need to continually change ourselves, stay flexible and adaptable while continually influencing improvement in those around us. The leadership characteristics that Burns describes include charisma, vision, intellectual stimulation and the ability to inspire others. Utilizing a transformational framework that emphasizes outcomes, allows us to lead others in the reformation of healthcare and the development of the nursing profession. While I and others hold a formal leadership position in the organization, all nurses at all levels and in all practice settings have the potential to be transformational leaders.

As transformational leaders, we will use MedConnect as a tool to help us provide safe, high quality, and compassionate care to our patients and their families. This is possible because this technology allows us to assure we are administering the correct treatment to the correct patient at the correct time. It will provide "reminders" if an assessment or intervention is due and has not been documented against. We need to assure that we, as well as our peers, follow the safeguards in the system. It may be tempting to do a "work around" at times to expedite documentation. However, the risk to patient safety will not make it an acceptable alternative.

In addition, we will use MedConnect as a tool to help us advance practice. The information stored in the patient's medical record will be more easily retrievable than the current process of reviewing paper medical records. We will be able to monitor quality indicators in real time. This data will help us to evaluate if our practices today are achieving the outcomes we expect. If not, we will change practice and monitor outcomes.

I want to take this opportunity to recognize the work of the MedConnect work group. Marilyn Booker, Director of Nursing Informatics, is the lead person for the group which includes Karen Droter, Carolyn Fisher, Althea Baile, Elizabeth John, Alice Slavik, Robin Craycraft, Deb Wagner, Kathy Jones, Mary H. Smith and Wendy Butcher. They have spent countless hours assuring every aspect of nursing care documented in MedConnect will meet regulatory and quality standards. Their passion for this project is very evident. They will continue to play a key role as we begin staff training and prepare for "go live" implementation. If you are interested in joining the MedConnect team to play a pivotal role during this transition, contact your Patient Care Manager.

As Burns says, transformational leadership is needed to change practice. Utilization of MedConnect gives each member of the Nursing Department an opportunity to become a transformational leader. ■

We need to continually change ourselves, stay flexible and adaptable while continually influencing improvement in those around us.

Removing the Obstacles in Order to Prevent Falls

Maria T. Zickuhr, RN, MSN, CMSRN

Our journey to improve quality of care through implementation of the Hendrich II Falls Prevention Model began on December 4, 2008. Our goal to decrease falls to 2% per 1000 patient days, *without* patient injury is a challenging one—but one our nursing staff can meet. Now that equipment is available on each unit and staff have been educated, we are well on our way to implementing the new protocol.

It took a lot of effort from many people to review the literature, evaluate the model, develop the documentation tools, decide on the interventions and equipment and provide education for both the model and new equipment. The Falls Task Force, as well as Nursing Leadership realize, as with any change in practice, there is a learning curve. In any implementation, there is always some resistance or barriers to change, in addition to a period of adjustment where fine tuning and clarification is needed.

Resistance to change can be evident in many ways:

- Comments such as, "we don't have enough staff to physically remain with high-risk fall patients while toileting"
- Not utilizing the falls prevention equipment because the manager or staff feel they have not been adequately educated
- Staff arbitrarily not using the alarms and pads for confused patients because the alarm keeps going off
- Staff complaints that the documentation is too time consuming.

Resistance to change provides obstacles that potentially can prevent us from meeting our goals. If you or your unit are meeting barriers to carrying out the protocol or feel you need more education, please communicate your need. If additional education on the use of alarms, gait belts and walkers is needed, speak up and education opportunities can easily be arranged.

If you have questions on the rationale for some fall prevention interventions, ask your Professional Practice Council Representative. Knowing the evidence behind the change in practice might make more sense and therefore motivate you to follow the protocol.

For example, did you know that more than 33% of the falls at Good Samaritan Hospital happen while patients are toileting? That is why the new protocol requires staff to physically remain with a confused high-risk fall patient while on the commode or toilet. Just implementing this one change in practice could reduce our falls rate by 33%! In addition, using the alarms alert staff that the patient is trying to get up—before a fall can occur! Using the alarms and staying with patients while toileting will help us meet our goal to decrease falls and prevent injury.

Getting familiar with the equipment will take time. Using the musical scale (do-re-me) alerts staff that a high-risk fall patient is getting up without assistance. As nurses and techs become more familiar with the equipment, we hope that staff will appreciate its role in preventing falls.

No doubt, adequate staffing is needed for staff to carry out the fall prevention interventions: more frequent rounds or staying with patients while toileting. Brainstorm with your patient care manager and fellow staff members on how you can successfully implement the falls protocol on your unit.

All patients with a physician order of complete bed rest do not need to be marked as a 4 on the Get-up and Go Test. In the Hendrich model it states:

In the instance in which the patient mobility assessment portion of the tool (rising from the chair) cannot be accomplished because of temporary inability to assess the patient's status, it is appropriate to use the most recent observation until a current one can be completed to score the patient's risk.

The Hendrich II Falls Prevention Model evaluates only intrinsic factors (anticipated physiological factors or symptoms). It does not evaluate extrinsic factors such as lighting, bedrails, restraints etc. It does not include independent risk factors such as age, number of medications, and history of falls.

Compared to normal patient, the research shows:

Factor	Risk
Confusion, Disorientation, Impulsivity	7 times at risk
Symptomatic depression *(Must be symptomatic during this hospitalization)*	3 times at risk
Altered Elimination (exclude Foley)	1.6 times at risk
Dizziness/Vertigo	1.9 times at risk
Male	1.69 times at risk
Antiepileptic	2.89 times at risk
Benzodiazepines	1.7 times at risk
Ability to rise in a single movement	no increase risk
Pushes up, successfully with one attempt	2.16 times at risk
Multiple attempts but successful	4.2 times at risk
Unable to rise without assistance	10 times at risk

HENDRICH II FALLS PREVENTION MODEL

STEP 1 Assess patient using model on admission and at the beginning of each eight-hour shift and when patient condition changes

STEP 2 Ensure fall prevention for ALL patients using BASIC SAFETY PRECAUTIONS

STEP 3 Implement MANDATORY INTERVENTIONS for all patients with a score of five or greater: Sign, Kardex, Plan of Care, Handoff Sheet, Pt Education, Hourly or more frequent rounds and remaining with the patient while toileting. Implement the Sitter Select Alarm with magnet, bed and chair pad for all confused patients

STEP 4 Implement interventions targeted to specific patient based on specific risk factors (score of five or greater)

STEP 5 Teach and/or reinforce to patient or significant other every eight hours (score of five or greater)

STEP 6 Complete Post Fall Analysis if patient has a fall. Evaluate reason for fall. Alter Plan of Care. Notify the physician. Notify the family. Provide treatment.

If the patient is unable to perform any mobility maneuvers, other risk factors could still be assessed but nursing judgment would be required to determine the patient's actual risk of falling if they are incapacitated.

If the patient is on bed rest due to a Physician's Order, but has the capability of getting out of bed or rising without assistance, score the patient using your nursing judgment. For example, a male patient, who is able to ambulate independently, is ordered bedrest because of a newly diagnosed lower leg DVT. The patient is capable of getting up in a single movement without falling but can not get out of bed for medical reasons. As long as this patient does not have any other risk factors, he would be scored a one on the Hendrich II Falls for male gender and would not be high risk for falling. Of course, if the patient has other risk factors that deem him a high risk for falls then calculate the score accordingly.

Another example would be a patient that is paralyzed but does not have the ability to move. This patient should not be marked as a 4 on the Get Up and Go Test because the patient is not at risk for falling. However if a patient is paralyzed, spastic and able to sit in a chair, that patient is at risk for falling. The nurse should use good nursing judgment when scoring the patient. A 2% fall rate with a zero injury rate is a difficult goal. Let us put our efforts where they will make the most good to decrease our falls:

- Provide adequate staffing in order to prevent falls
- Provide consistent managerial support for use of new fall prevention equipment
- Encourage staff to stay with all high-risk fall patients while toileting
- Encourage staff to provide an alarm to all patients that are confused.

The key is to ensure all confused, high-risk fall patients are placed on an alarm with a magnet, using both a bed and chair pad, in addition to not leaving them unattended when toileting. Our 2% fall goal with no injury will stretch our abilities but is possible if we all work together. Our team effort will be rewarded with improved patient outcomes and decreased patient injury. Who can argue with that? ■

Maria T. Zickuhr, RN, MSN, CMSRN, is an RN IV and works on 5 West. She is the Co-Chair of the Research Council, is a member of the Professional Practice Council and has championed the Falls Program since 2003.

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Helping Patients Move Beyond The CAGE

Robin Craycraft, RN, MSN, CPHQ

Approximately one of every five patients admitted to the hospital is an alcohol abuser. The problem of alcohol dependence is prevalent in both males and females, and across all socioeconomic and ethnic backgrounds.

A cessation in alcohol intake during an acute hospital admission may result in alcohol withdrawal syndrome and/or delirium tremens both of which can cause complications and even death. It is important for nurses to screen for alcohol dependence during their initial patient assessment in an effort to identify potential barriers that may impede the progress of a patient's immediate acute care needs.

Excessive drinking increases the likelihood of health problems such as hypertension, gastrointestinal bleeding, malnutrition, cirrhosis of the liver, hemorrhagic stroke, cancer and depression. Elderly patients who are alcohol dependent may be at even higher risk for complications secondary to potential drug-alcohol interactions with their greater use of prescription and over-the-counter medications compared to younger adults. There is also a potential for injury during alcohol withdrawal from seizures and/or falls.

The service appropriate for patients identified at high risk for alcohol dependence in the acute care setting is social work.

The need for early identification of patients at high risk for alcohol withdrawal in healthcare settings is emphasized in the literature. Reasons for early identification include: the need to decrease the clinical burden placed on hospitals; an opportunity to decrease the risk for mortality and morbidity associated with delirium tremens; the opportunity to decrease barriers that may prevent a patient from achieving acute medical goals; to increase patient safety; and to provide links to other services that may be needed by the patient and/or family.

ICD-9 coding data from calendar year 2007 was reviewed to assess the prevalence of alcohol dependence syndrome at Good Samaritan Hospital. While 0.6% of the patients admitted in 2007 had a primary diagnosis of alcohol dependence syndrome and/or alcohol psychosis; coding data showed that alcohol dependence is an even more common secondary medical diagnosis. In 2007, there were 429 patients (3% of total admissions) admitted to Good Samaritan for other conditions who also had a secondary diagnosis of alcohol dependence syndrome. Alcohol dependence and withdrawal may pose significant barriers to a patient admitted with another acute medical problem including increased risk for complications and increased length of stay.

The frequency with which the GSH nurses care for patients undergoing alcohol withdrawal brought to light some performance improvement opportunities including the need to identify patients at risk at the time of admission, the need to develop guidelines for nurses to care for these patients, better management of withdrawal symptoms via evidence-based tools and physician approved order sets, plus the need for a standardized approach to counsel, educate and provide resource referrals to the patients and their families.

The initial nursing assessment at Good Samaritan included questions about alcohol use, amount, patterns, type and last drink. While these questions may indicate a patient may have an alcohol abuse problem, there are assessment tools available that may be more effective in identifying patients at high risk for alcohol withdrawal syndrome.

An alcohol abuse screening tool known as the CAGE questionnaire was selected for incorporation into the initial nursing assessment as part of an electronic medical record (EMR) documentation system planned for implementation in 2009. The CAGE questionnaire has proven to be a valid screening tool in multiple studies and consists of four pneumonic screening questions. The four questions are: 1) Have you ever felt that you ought to **Cut** down on your drinking? 2) Have people **Annoyed** you by criticizing your drinking? 3) Have you ever felt bad or **Guilty** about your drinking? 4) Have you ever taken a drink first thing in the morning to steady your nerves or to get rid of a hangover (**Eye-opener**)? A yes response to two or more of the questions is considered a positive CAGE score. A positive CAGE score indicates the need for a more in-depth assessment and possibly strategic interventions to prevent alcohol withdrawal related complication. Instead of waiting to teach the nurses how to use the CAGE questionnaire with the advent of the EMR next year, the Nursing Department set forth to incorporate this tool on paper so the

nurses could become familiar with the tool prior to transitioning to the electronic system.

The problem of inadequate screening for alcohol dependence at the time of admission was discussed at both the hospital's Nursing Professional Practice Council and the Nursing Management Council. Discussion at these council meetings allowed time to recognize and discuss potential barriers, solicit feedback, and ask questions.

A major consideration with the practice change involved developing guidelines for the nurses to follow should their patient have a positive CAGE score. The current nursing assessment at the time of admission did not trigger any action based on the patients' response to the alcohol history; therefore the problem was not always recognized or acted upon until symptoms of withdrawal manifested.

The service appropriate for patients identified at high risk for alcohol dependence in the acute care setting is social work. At the very least, social work can assess readiness to change behavior and provide the patient with referral information. The EMR system planned for implementation in 2009 is designed to trigger a referral to the social work department for any patient with a positive CAGE score. It was obvious that this action could potentially have a great impact on the Social Work Department's referral volume; therefore collaboration with social work was crucial to the practice change.

Discussions with the staff nurses at the Professional Practice Council meeting also revealed opportunities for problems with the current alcohol withdrawal order set. The order set was designed to direct pharmacologic and other therapeutic measures for patients whose alcohol withdrawal symptoms had reached a moderate level. An opportunity to begin treatment and interventions sooner was identified in order to better manage symptoms. Collaboration with both Pharmacy and physician faculty was needed.

Key stakeholders in the process were identified and assembled to form an interdisciplinary team. The main objectives for the team were to determine how to incorporate the CAGE questionnaire into the existing nursing assessment process, set up a process to refer patients to social work, develop nursing guidelines for use of the tool, and to review and revise the hospital's existing alcohol withdrawal order set which was several years old.

Three changes were made to the nursing practice as a result of the interdisciplinary team's work. Nursing guidelines were developed for the nurses to utilize for the care of the alcohol dependent patients based on these changes.

First, the alcohol history portion of the initial nursing assessment was modified to reflect the exact questions asked in the EMR system including the CAGE questionnaire. The paper version of the assessment required several modifications based on staff nurse's feedback before being finalized.

Second, a positive CAGE score directs the nurse to initiate two actions: 1) order a social work consult, and 2) assess the patient for alcohol withdrawal symptoms using the revised Clinical Institute Withdrawal Assessment of Alcohol Scale. The CIWA-Ar scale is another proven tool in the literature. The CIWA-Ar scale was already being utilized by the GSH nurses if their patients were placed on the alcohol withdrawal order set. The revised alcohol assessment now guides them to initiate the CIWA-Ar tool at admission based on a positive CAGE score. A CIWA-Ar assessment that reveals any signs and symptoms of alcohol withdrawal triggers notification of the physician. The physician is then responsible to conduct a more in-depth assessment in order to diagnose the symptoms and may trigger the physician to initiate the alcohol withdrawal order set.

The order set was ultimately separated into three distinct order sets: mild, moderate and severe alcohol withdrawal. The order sets are triggered based on the patient's CIWA-Ar score with a score of 1–7 designating mild withdrawal; a score of 8–25 designating moderate withdrawal; and a score greater than 25 designating severe withdrawal. The order sets include monitoring guidelines for nurses, lab tests, IV fluid orders, safety precautions, and medication orders.

The third change in nursing practice involves the use of the Richmond Agitation-Sedation Scale (RASS) to assess the effectiveness of medications used to treat withdrawal. The RASS is a valid and reliable tool that uses a 10 level scale to describe agitation-sedation behavior (+4 "combative" to -5 "unarousable"). The alcohol withdrawal order set directs the nurse to reassess the patient 30 minutes after administering a sedation drug for its effectiveness. The goal is to maintain the patient in a drowsy state which is a -1 on the RASS Scale. Frequent monitoring and communication with the physician is important for managing these patients.

Finally, the social work department worked with the interdisciplinary team to standardize their approach when a consult is ordered for alcohol dependent patients. They developed a script to assess patient readiness for change and updated and standardized their community resource list which is shared with the nursing staff.

Identifying patients at risk for alcohol withdrawal and related conditions before symptom manifestation is a safety goal for both patients at risk and the nurses who care for them. Implementation of the CAGE questionnaire and actions to take based on a positive screen is an important step in helping to identify patients at risk and improving the provision of care at Good Samaritan Hospital. ■

Robin Craycraft, RN, MSN, CPHQ, is the Performance Improvement Manager. She is responsible for assurance of Joint Commission Standards related to clinical staff and acts as the PI resource for many PI projects. Robin coordinates the hospital quality indicator data, physician peer process and the monthly Quality Council Meetings. Robin is a valuable resource for the Professional Practice Council, PI Council and Education Council.

References: Provided upon request.

Technology Day

OLLY WOOD

PRESENTING THE
TECHNOLOGY
SHOWCASE

Eight Hospitals=ONE System
MedConnect!
Go Live: March 2009

Carolyn E. Fischer, RNC, BSN

Emergency Department's SBIRT Initative

Carolyn E. Fischer, RNC, BSN

Alcohol is the most commonly used drug in the United States and a leading cause of morbidity and mortality.[1] Over 20,000 (7.6 million per year) people enter emergency departments everyday for alcohol-related injuries and illnesses.[2] At the University of Texas Southwestern Medical School, Dr. Larry Gentilello and colleagues conducted a cost benefit analysis published in the *Annals of Surgery* in April 2005.

The study showed that an estimated 27 percent of all injured adult patients are candidates for a brief alcohol intervention. The net cost savings of the intervention was $89 per patient screened, or $330 for each patient offered an intervention. The benefit in reduced health expenditures resulted in savings of $3.81 for every $1 spent on screening and intervention.[3] The ENA Injury Prevention Institute/EN CARE says that alcohol use and abuse is associated with an annual economic cost of approximately $185 billion and 75,000 deaths. As far back as 1990, Dr. Lowenstein's article published in the *Journal of Trauma* stated that alcohol has shown to be a factor in 40 percent or more of homicides, suicides, fatal motor vehicle crashes, burns, drowning, and falls.[4]

I could keep going. However, the point I am making is something I have been aware of since I first began working in ED nursing in 1974. My initial contact with alcohol-related patients was one of fear and dread. One could never guess what would happen when the alcohol patient entered the Emergency Room. There was crying, screaming, hysteria, sleeping, snoring, vomiting, diarrhea, pain, injuries and most of all—sorrow. I quickly realized that the effects of alcohol encompassed whole families. I also knew that there seemed to be too many alcohol-related problems on most nights. I decided that I must learn about this problem in order to conquer my fears. In 1992, I became a certified nurse in what is now known to be the disease of chemical dependency through The Consortium of Behavioral Health Nurses & Associates. I continue to use this certification to advocate for these patients in the Good Samaritan Hospital ED and to help educate patients, families and staff on their care and up-to-date treatment advances.

SCREENING > BRIEF INTERVENTION > REFERRALS > TREATMENT

An Early Intervention Approach

In July 2008, both *Nursing Spectrum* (www.nurse.com) and *Advance for Nurses* (www.advanceweb.com) published articles describing the new, evidenced based SBIRT initiative. The **S**creening, **B**rief **I**ntervention and **R**eferral to **T**reatment (SBIRT) represents a paradigm shift in the provision of treatment for substance use and abuse. Traditional substance abuse disorder treatment assists patients who are **already** struggling with diagnosed conditions such as alcohol and substance dependence or abuse. The SBIRT model begins with a focus on risk and targets patients who might be at risk of developing or having a substance abuse disorder. SBIRT concentrates on opportunities to help patients understand hazardous use while helping them to reduce or eliminate it.5

System for Assessment, Intervention and Treatment

The Emergency Department Council decided to adopt SBIRT by using materials offered by the ENA's free SBIRT toolkit (www.ena.org/ipinstitute/SBIRT/default.asp). The SBIRT roll-out is also the project for my RNIII Clinical Ladder goal—FY'09. Currently, a task force is developing guidelines for its use and has adopted the patient's paperwork provided in the toolkit. The toolkit provides a pocket guide for nurses, an educational video that will be placed on Sitel, and a discharge instruction model that we plan to use to update the Logicare instructions. The core components of the SBIRT directs ED nurses to first conduct a brief **S**creening to determine the severity of the patient's alcohol use and help decide if the patient's drinking patterns place them at risk. It will begin at triage with a universal Alcohol Screening Question—"How often in the past year did you drink beer, wine, or distilled spirits?" If the patient answers

'yes', the nurse caring for the patient continues with the NIAAA Quantity and Frequency questions which helps define the patient's drinking habits and determine if they are above the recommended levels. The screening also includes the use of the CAGE screening tool which has been incorporated into the nursing data base. **B**rief **I**ntervention follows. This is a time-limited (5–15 minutes), patient-centered strategy that focuses on changing a patient's behavior by increasing insight and awareness regarding their alcohol use. It provides information and feedback: the patient's blood alcohol content (if available), the link between drinking and injury/illness, guidelines for lower-risk alcohol consumption, and strategies to reduce or stop drinking. If the patient is receptive, negotiations continue that will help the patient establish drinking level goals and appropriate **R**eferrals follow. These patients will be given a list of local resources, educational information and a referral to a primary care provider for further assessment. When the patient is clearly alcohol dependent, an appropriate referral to **T**reatment will then be made by the ED's LIP.[6]

SBIRT is the Future

As of August, 2007, SBIRT grantees funded by SAMSHA (Substance Abuse and Mental Health Screening Administration—www.samsha.gov) have screened over 536,000 individuals. In 2002, researchers analyzed more than 360 controlled trials on treating alcohol use disorders and found that alcohol screening and brief intervention was the single most effective treatment method of more than 40 methods studied.[7] Despite overwhelming research to the contrary, many practitioners still believe that treating these patients who report to the ED is futile.[8] Good Samaritan's Emergency Department will use SBIRT as best practice for our alcohol-impaired patients. Studies on brief intervention in emergency departments have documented the positive effects such as reductions in alcohol consumption, successful referral to and participation in alcohol treatment programs, reductions in repeat injuries and injury hospitalizations, and reduction in drinking and driving with fewer moving traffic violations. This effort will provide increased opportunity for Good Samaritan Hospital ED nurses to provide prevention efforts here and in the community. "Fewer alcohol and substance abuse-related patients means shorter waits, reduced staff workloads, safer emergency departments, and a safer community as a whole," says 2008 ENA president Denise King, RN, MSN, CEN.[9] ■

> **I quickly realized that the effects of alcohol encompassed whole families.**

Carolyn Fischer RNC, BSN was the first ED nurse (Outpatient Department) at Good Samaritan Hospital in 1976. She left in 1978 and returned in 2003. She is known especially for her expertise in chemical dependency. She was the manager of Bon Secours' Chemical Dependency Unit from 1987–1992 and their ED Crisis Center from 1999–2003. She serves as the ED Rep to the Professional Practice Council, MedConnect Committee, R&R Council and Environment of Care Committee.

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Howard Besner, Pharm.D.

Alcohol Withdrawal and the Medications Used in its Management

Howard Besner, Pharm.D.

Alcohol abuse is a tremendous public health issue. It is estimated that over 18 million Americans meet the criteria for alcohol abuse and dependence. Also, alcohol abuse causes over 100,000 deaths in the United States each year.

Alcoholism is a chronic disease that can be viewed on a continuum, beginning with alcohol abuse and progressing into alcohol dependency of varying severity. For many individuals with a significant physical dependency, a cluster of withdrawal symptoms known as alcohol withdrawal syndrome (AWS) may appear upon the cessation or reduction of alcohol consumption, or when individuals reach a level of such significant tolerance that they cannot consume enough alcohol to delay withdrawal.

Depending on the degree of physical dependence, symptoms of AWS can range from discomfort and mild tremor to alcohol withdrawal-related delirium, seizures, and death.

The most severe form of alcohol withdrawal is delirium tremens (DTs). The characteristic features of DTs are hallucinations, diaphoresis, agitation, low-grade fever, tachycardia, hypertension, and disorientation. Other physiologic changes seen in DTs include elevated cardiac indices, oxygen delivery, and oxygen consumption. Approximately 5 percent of patients with ethanol withdrawal progress to DTs. The mortality rate of DTs may be as high as 35 percent if untreated but is less than 5 percent with early recognition and treatment.

Patients who are awake and cognitively responsive should be interviewed to assess their history of alcohol use.

A standardized questionnaire can determine a patient's alcohol use history and identify patients with alcohol-related problems. The CAGE questionnaire is a screening tool for the detection of alcohol-related problems. The most commonly used instrument to measure the degree of alcohol withdrawal is the Clinical Institute Withdrawal Assessment (CIWA-Ar). The CIWA-Ar is a 10-item scale used for grading the severity of alcohol withdrawal symptoms. The assessment provides an AWS score with a maximum of 67 points. In general, a CIWA-Ar score of <8 points signifies mild withdrawal, a score of 8 to 25 is associated with moderate withdrawal, and ratings greater than 25 constitute severe withdrawal and an increased risk of seizures.

Alcohol withdrawal is a dynamic process and the patient's needs should be reassessed frequently. The general care of alcohol withdrawal involves the correction of abnormalities in fluid levels, electrolyte levels, or nutrition. Intravenous fluids may be necessary in patients with severe withdrawal because of excessive fluid loss through hyperthermia, sweating, and vomiting.

Multivitamins, thiamine 100mg, and folic acid 1mg should be given I.V. once daily for the first three days. If intravenous fluids are administered, thiamine (100mg I.V.) should be given before or with glucose to prevent precipitation of Wernicke's encephalopathy.

Pharmacologic treatment of alcohol withdrawal syndrome involves the use of medications that are cross-tolerant with alcohol. Benzodiazepines are the medication of choice because they have a high therapeutic index and interact with ethanol on the benzodiazepine-GABAa-chloride receptor complex. They also have an ideal pharmacologic profile because of their rapid onset and prolonged duration of effects.

Diazepam is the preferred agent except in elderly, patients who are NPO, or have liver dysfunction. Lorazepam may be the preferred agent in patients who metabolize medications less effectively, particularly the elderly and those with liver failure. Also, lorazepam is the only benzodiazepine with predictable intramuscular absorption.

There are some medications that may be used as adjuvants to benzodiazepines in the management of alcohol withdrawal syndrome. These medications should be used only as adjuvants not alternatives or monotherapy.

Adjuvant treatment with a beta blocker, such as metoprolol, should be considered in patients with CAD, who may not tolerate the strain (tachycardia, hypertension, diaphoresis, etc.) that alcohol withdrawal can place on the cardiovascular system. Clonidine also has been shown to improve the autonomic symptoms of withdrawal. Beta blockers or clonidine should not be used as the only medications to control autonomic symptoms; they can only be added to benzodiazepines for this purpose.

Haloperidol can be used to treat agitation, hallucinations, and disorientation associated with alcohol withdrawal. It should however, be

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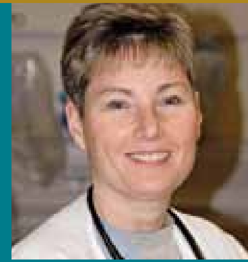
A REVIEW OF THE LITERATURE

Confirming Nasogastric Tube Placement

Karen Droter, RN, BSN, CCRN



Karen Droter RN, BSN, CCRN

Traditionally, nurses have used auscultation as the method to confirm correct nasogastric tube placement. A literature review was done to explore and evaluate the various methods available to confirm proper nasogastric tube placement. Methods for NGT placement include the following: observation of aspirate, pH testing, capnography, enzyme testing with bilirubin analysis, auscultation method and radiography.

Observing the nasogastric tube aspirate is reliable and is commonly used when the NG tube is used for gastric decompression. The practitioner needs to be able to differentiate the difference between gastric and small bowel aspirate. However, this method is not accurate if continuous feedings are in progress and is less useful for detecting inadvertent respiratory placement due to the appearance of the aspirate. Another method for determining NGT placement is to test the pH of the aspirate, which has limitations. This method can be helpful in differentiating between gastric and respiratory placement when the gastric pH is low, but is impossible to distinguish if the pH is > 6. Acid inhibiting medications and continuous feedings can alter the accuracy of pH values. Capnography can be used if the tube has inadvertently been inserted in the respiratory tract. Although an exhaled carbon dioxide waveform will be displayed, location and tube patency were listed as limitations to observing a normal capnography tracing. Enzyme and bilirubin testing have been studied. Enzyme testing is inexpensive but a bedside test is not available at this time.

The "traditional" nursing practice method used to assess nasogastric tube placement is auscultation. The nurse would flush the NG tube with air and auscultate over the epigastric area. If the tube is in the stomach a whoosh sound is heard. This method is not accurate in differentiating between respiratory and gastrointestinal placement. Multiple anecdotal reports have been published on the failure of this method. Metheny et al recommends that auscultation be banned from use as the sole or primary method of checking tube placement. The only reliable method for confirming correct nasogastric tube placement is radiography. According to Metheny and Meert, radiographic confirmation of correct tube placement is now considered the "gold standard".

The American Association of Critical Care Nurses issued a practice alert on Verification of Feeding Tube Placement. It states radiographic confirmation is the only reliable method to date of confirming enteral tube placement. The pH and appearance of aspirate from the newly inserted tube, while not 100 percent reliable, are highly suggestive of gastric or small bowel placement and can be used as an initial indicator of placement.

However, radiographic confirmation should always be done. AACN's Practice Alert also suggests to mark and document the tube's exit site from the nose or mouth immediately after radiographic confirmation of correct tube placement and to observe the mark to assess for a change in length of the external portion of the tube.

Having reviewed the literature, anticipate changes in nursing practice here at Good Samaritan Hospital regarding care of the patient with a nasogastric tube. The following practice changes have been approved by the Professional Practice Council:

Placement of a nasogastric tube inserted for feeding and /or medication administration will be confirmed by X-ray prior to use.

Mark and document tube's exit site from the nose or mouth immediately after radiographic confirmation.

Observe tube length and exit site marking before each intermittent feeding or medication administration and at regular intervals (every shift) during continuous feedings. ■

Karen Droter, RN, BSN, CCRN, is an RNIII working in the PACU. She is a member of the MedConnect Committee and is a long standing member of the Professional Practice Council. She is the 2008 recipient of the Nurses Week Trusted Nurse Award. Karen was recognized by the Research Council for her evidenced-based project on confirming NG placement.

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Enriching My Career Through Certification

Ray Widmark, RN IV, BSN, BS, ASN, CCRN, ICU/CCU

Ray Widmark, RNIV, BSN, BS, ASN, CCRN

What a journey! When I first started on the path toward certification, I devised what I thought was a conservative game plan. I figured it would take me about two months to study all of the material for the CCRN exam, then another couple of weeks to do practice exams. After about ten weeks, I should have been ready to take the test, right?

Sometimes, the best laid plans just don't come to fruition. It took me over a month just to study the cardiac portion of the exam. Granted, cardiac is about one-third of the exam material, but I still had a lot more studying ahead of me.

I did not make it a secret that I was studying for the CCRN. In fact, when I started to study in November, a dozen other nurses from the ICU and PACU joined the challenge. Not all of those nurses were able to make it to the end. Some left Good Sam, some hit bumps in the road. After all, life happens…

As I was learning the material, I would apply it to my practice. I found myself having more thoughtful input during patient rounding, and having more advice for the house staff when reporting changes in patient conditions.

After five months of studying, although nervous, I set my exam date for early June. I continued to study right up until exam time. There was so much information that I didn't feel that I knew it all. I even considered postponing the exam. It turns out that I probably should have—I missed passing by a mere two questions. I'd like to think that I'm smarter than the average person, but this was a serious blow to my self-esteem. I hadn't failed an exam since ninth grade!

I went on vacation and left the books at home. When I got back, I scheduled myself to re-take the exam in late July. I knew where I had knowledge deficits, so I went back to work. When test-time came again, my confidence was brimming. I wouldn't say that I "breezed" through the exam, but I finished with lots of time to spare, and passed with a high score.

I hadn't felt such relief in a long time. It felt like a 60-pound backpack was just lifted off my shoulders! I called my managers to let them know my results. Even though I tried to play cool, they could hear the excitement in my voice.

Word spread quickly. I was getting congratulatory hugs and adulations at every turn.

The implications of my certification are threefold. First, and foremost, I am a much better advocate for my patients. I had been acquiring more and more knowledge over the months leading up to the exam. I have also continued to expand my base of knowledge in critical care. Hence, I am more able to fully explain diagnostic tests, disease processes and treatments to patients and their families, as well as help physicians guide treatment.

Secondly, as soon as word spread that I had passed the CCRN, people were all of the sudden asking me the tough clinical questions. I had become a resource for many of the staff. It is great to be able to pass on knowledge, but I also have the burden of making sure that what I tell people is, indeed, factual.

In addition to being a resource, some nurses tell me that I have motivated them to achieve certification. The ICU managers said that I was the guinea pig (for the record, I prefer the term "test pilot") for taking the exam. Before me, there was no "home grown" CCRN in the ICU. Once nurses saw that I was able to pass the test, the seal was broken. Certification in the ICU is becoming epidemic! More and more ICU nurses have either become certified, setting exam dates, or studying the material. The net effect is exponential. These nurses are using their knowledge in daily practice, and passing on that knowledge to their peers in the ICU and other units as well.

There was one more benefit to becoming a CCRN. For a few years, it had been my goal to be a Clinical Ladder Nurse IV–Expert Practitioner. It was never too tough to acquire all of the points needed for that promotion. The main thing that had held me back was not being certified. Once I had the CCRN under my belt, I not only achieved that goal, but was able to accomplish the broader goal of becoming an RN IV. For me, certification was the gateway to the ultimate clinical ladder promotion.

There used to be a fear of taking the CCRN exam, but the paradigm is shifting—to being fear of the one left behind. ■

Ray Widmark is an RN IV, working in the ICU/CCU. He is an active member of the Professional Development Council.

Kudos & Other Good Things to Know

NURSING COUNCILS

Beginning in January 2009, new chairs and co-chairs took over leadership of the Nursing Councils. Best of luck in the coming year to all council members as they strive to improve patient care at Good Samaritan Hospital!

Professional Practice Council

Chair: Suzanne Bonner

Co-Chair: Sandy White

Education Council

Chair: Joyce Bowers

Co-Chair: Karen Feury

Performance Improvement Council

Chair: Patricia Jasinski

Co-Chair: Ruthann McCahill

Professional Development Council

Chair: Joyce Bowers

Co-Chair: Diane Rafferty & Keisa Moore

Research Council

Chair: Sadda Raddar

Co-Chair: Maria Zickuhr

Recruitment and Retention Council

Chair: George Farley

CLINICAL LADDER

In December 2008, The Professional Development Council announced the approval of 20 new and renewal advancements! Please congratulate these nurses for their hard work and promotion.

New Applicants

Angela Caudill, RN III

Jeanette Nimon, RN III

Renee Pate, RN III

Kildia Cepeda, RN III

Sandra White, RN III

Jennifer DiFatta, RN III

Elizabeth Smart-Chapman, RN III

Jackie Johnson, RN III

Althea Bailey, RN III

Joyce Falkenhan, RN III

Nyattu Barrow, RN III

Jennifer Gunter, RN IV

Ray Widmark, RN IV

Renewals

Patricia Jasinski, RN III

Temika Griffin, RN III

Mishelle Faune, RN III

Stacey Lupus, RN III

Lelia Ignacio, RN III

Saddah Radder, RN III

Debora Huber, RN III

The Professional Development Council will accept Clinical Ladder Packets on March 1st.

CERTIFICATIONS

Congratulations to the following nurses who obtained certifications in their specialties this past quarter.

PACU

Karen Droter, RN, CCRN, CPAN

ASU

Ditas Sison, RN, CAPA

SSU

Rene Pate, RN, CMSRN

Surya Chacko, RN, PCCN

ICU/CCU

Jennifer Gunter, RN, CCRN

Ray Widmark, RN, CCRN

ED

Paul Hess, RN (CEN)

Loren Grimm, RN (CEN)

4 East

Althea Bailey, RN, PCCN

Education

Melanie Colbourn, RN, Dermatology Nurse Certified

Congratulations to Collen Reft, Nurse Practitioner in the Renal Department, on being selected for a Champion Award!!! Colleen was recognized as an outstanding Good Samaritan at the November Leadership meeting.

Congratulations to educators, Joy Burke and JoJo Romero-DeSlavy! The poster abstract on the GSH RN Mentoring Program submitted by Joy and JoJo has been accepted for presentation at the annual 2009 National Nurses in Staff Development Organization convention. The convention will be held in Philadelphia in July 2009. ■

Alcohol Withdrawal Medications…

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used with caution in patients with a history of seizures, since this medication can lower the seizure threshold. Ondansetron (Zofran®) can be used for symptomatic relief of nausea and vomiting. For the control of high temperature, acetaminophen may be used. Acetaminophen, however, should be used with caution in patients with liver dysfunction.

Alcohol withdrawal seizures are typically brief. However, if prolonged, they are usually quickly terminated with benzodiazepines. Lorazepam, by the parenteral route, is preferred because it has a long redistribution time that enables it to have prolonged effectiveness. Midazolam (Versed®) may also be used to control seizures. However, its short half-life requires a continuous infusion to maintain sedation. Although phenytoin (Dilantin®) has no role in the treatment of alcohol withdrawal seizures, it is an appropriate adjunct in patients with an underlying seizure disorder.

In conclusion, alcohol withdrawal symptoms can range from minor symptoms such as insomnia and tremulousness to severe complications such as seizures and delirium tremens. It is, therefore, essential that accurate patient assessments be performed and appropriate withdrawal management or treatments initiated. Finally, the patient should be put in touch with local resources that will help him/her remain alcohol free. ■

Howard Besner, Pharm.D., is a Clinical Pharmacist at Good Samaritan Hospital and is a frequent contributor to Timepiece.

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Timepiece is a publication of Good Samaritan Hospital’s department of nursing. If you’d like to become a member of *Timepiece*’s editorial team or would like to participate in this publication, or to submit items for consideration, please contact Maria or Kathy. Remember: It’s your time!

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