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'Superbug' Outbreaks Thrust SNF Residents Into Spotlight

Researchers at Johns Hopkins Hospital recently set off warning sirens for long-term care providers when they announced that patients who were transferred from nursing homes and other long-term care facilities were many times more likely to carry "superbugs" than other hospital patients. Nursing home transfers were 12 times more likely to carry antibiotic-resistant bacterium *Acinetobacter*, and 22 times more likely to carry the infection if the resident used a wheelchair or was largely bedridden.

As a result, the Baltimore hospital will soon begin testing transfers from nursing homes for Acinetobacter. Such transferring residents will be treated as potential carriers unless the tests are negative, Johns Hopkins officials said. Testing can isolate such individuals and allow safeguards to be tailored to high-risk patient populations in the community, according to Trish Perl, M.D., study author and hospital epidemiologist.

In a related note, Illinois could soon become the first state to require hospitals to aggressively test for and control the spread of "superbugs" in hospital patients. A bill now moving through the Illinois legislature would mandate that hospitals test for MRSA in all intensive care and "at-risk" patients. The category includes nursing home transfers. Also under the bill, hospitals would be required to take certain measures to prevent transmission of the potentially deadly germs. These include isolating patients with MRSA and adhering to strict hand-washing practices. Moreover, anyone entering the patients' room would have to wear sterilized gown, gloves and masks.

Article from MLTCN*, June 2007*

In this Issue:

- Superbug Outbreaks
- Nurse Faculty Levels
- Wound Care
- Aspirin Uses
- MedicationUpdate
- Rumor vs. Truth
- NutritionUpdate

Nurse Faculty Levels Fuel Labor Shortage Fears

Despite an optimistic blip of interest from the nurse-candidate population, researchers warn that a lack of nurse educators likely will stymie attempts to curtail ongoing nursing shortages. Nurses are not pursuing advanced degrees in sufficient number to meet the demands for faculty and advanced practice roles, according to results of the first study to examine educational mobility among nurses.

A report on the North Carolina-based study appears int he May issue of the *American Journal of Nursing*. Study respondents were comparable to the national pool of registered nurses measured in the last National Nurses Sample Survey.

"The nursing shortage will not be remedied without having sufficient nursing faculty in place for both the immediate and long-range future," said James Williams Bevill, Jr., associate director for workforce development for the North Carolina Center for Nursing, Raleigh, NC, and one of the study's authors.

This study is the first to examine how nurses are using available educational pathways to acquire the degrees necessary for teaching, Bevill said. While the number of registered nurses has increased over the last 10 years, research suggests that not enough nursing faculty positions are being filled, he added. Worse, of the "small number" of nurses who do go on to earn a master's or doctorate in nursing, only 11% decide to become educators.

Younger age at entry into nursing, being male or belonging to a racial or ethnic minority were associated with being

Continued on Page 4

Wound Care

Wounds are as enduring as man. Caring for them is not a new concept. Documentation regarding the "three healing gestures" (i.e., wash the wound, make plasters and bandage the wound) was found in one of the oldest medical texts (a clay tablet) dating from circa 2200 B.C. Initially medicine men, witch doctors, and mothers passed down their intervention. However, occasionally, wounds would become "chronic" whereby they would fail to progress through an orderly and timely sequence of healing, or not result in the restoration of functional and anatomical integrity (i.e., an intact barrier). Chronic wounds presented a challenge to early health care providers and continue to present different challenges today.

Although many types of wounds may be considered chronic, in the medical literature the term "***chronic wound***" has become almost synonymous with ***skin ulcers*** (varicose, venous stasis, diabetic, and pressure). The three most common types of chronic wounds are lower-extremity or vascular/varicose ulcers, diabetic ulcers, and decubitus ulcers (i.e. Pressure ulcers).

Chronic wounds have a high prevalence across a multitude of health care settings including hospital, long-term care, and home care settings. In addition, the incidence of pressure ulcers is high, thought to be attributed to the aging population who are at increased risk of skin-related ulcers. Because of the associated morbidity and the long healing period often involved, chronic wounds are also very costly. Pressure ulcers are estimated to cost $500 to $40,000 per ulcer to heal, resulting in $1.3 to $5 billion spent annually in the US.

Wound management has evolved over the past century. In the early 1900s herbal remedies, wet to dry dressings and even surgical interventions were employed. Later in the century other techniques were introduced including specialized dressings, protective barrier films, pharmaceuticals and biologics.

The value of an effective guideline-based program for wound prevention and treatment is in lowering overall health care costs, reducing the multiplicity of products, improving wound healing and decreasing progression to more devastating and costly types of chronic wounds.

Article provided by The Wound Care Institute

Aspirin: Finding the Best Prophylactic Uses

Key point: For cardioprotection, doses of aspirin higher than 75 to 81 mg daily are not supported by available evidence, based on findings of a trial reported recently in *JAMA*. Higher doses are needed when prevention of colorectal cancer is an objective, and use of aspirin for prevention of cognitive decline is not likely warranted, according to a new analysis from the Women's Health Study. A third trial confirms the effectiveness of aspirin in preventing colorectal cancer and contributes evidence that the drug may reduce prostate cancer in men.

Finer points: Aspirin has long been evaluated for cardioprotection, colorectal cancer, and cognitive decline, but no one has been able to recommend a prophylactic dose with certainty. Conflicting results have come from the many studies that have evaluated the optimal aspirin dosage that balances risks and benefits. Tested doses have ranged from 50 to 1,300 mg/day.

Currently in the U.S., approximately 60% of people using aspirin for cardioprotection take 81 mg/day, while 35% of people take 325 mg/day. According to a new systematic review, the clinical benefit of aspirin is no greater with doses higher than 81 mg/day, and higher doses carry an increased likelihood of gastrointestinal bleeding. Despite this sound advice, interpatient variability in response to aspirin remains a concern, and how to apply these recommendations to an individual patient will remain unclear until routine clinical measurement of individual platelet function is feasible.

Aspirin has also been touted for prevention of cognitive decline. However, in the Women's Health study, assessments of cognitive function were similar in groups receiving aspirin or placebo. More than 6,000 women aged 65 or older were included in the randomized, double-blinded, placebo controlled trial of low-dose aspirin (100 mg) versus placebo given on an every-other-day basis. The original intent of the trial was to evaluate cardiovascular and cancer outcomes, but the length of the trial provided an opportunity to study aspirin's effect

Continued on Page 4

Prevalence of MRSA in Health Care Facilities 10 Times Higher Than Expected

The Association for Professionals in Infection Control and Epidemiology has just completed the first national prevalence study of Methicillin-resistant *Staphylococcus aureus* (MRSA) in health care facilities, including nursing facilities. About 5% of residents were found to be infected or colonized with MRSA. Details are available at: http://www.apic.org/mrsastudy

In related news, the Centers for Disease Control and Prevention has just released "Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, 2007." The document is linked from the ASCP Infection Control Briefing Room at: http://www.ascp.com/advocacy/briefing/infectioncontrol.cfm

New Information Shows Potential for Blood Pressure Drug, Isradipine, to Prevent or Slow Parkinson's Disease

In an advanced online publication of the journal, Nature, scientists at Northwestern University published their findings on the possible use of isradipine in Parkinson's disease. The study, which was performed in mice, has sparked the planning of human clinical trials. The study reveals that isradipine may benefit people both before and after diagnosis of Parkinson's Disease. When dopamine cells are young they use sodium ions to carry their electrical signal, but as they age they rely more heavily on an unstable channel that uses calcium ions instead. Isradipine, a calcium-channel blocking agent, would be used to keep younger cells using sodium ions and to revert older cells back to using sodium. By preventing the switch from sodium to calcium, a greater amount of dopamine cells would be kept alive and functional. If isradipine can rejuvenate older, dying cells back to using sodium channels, they can then be treated along with the remaining cells with L-DOPA, the current treatment for Parkinson's symptoms. The greater the number of dopamine cells available for L-DOPA, the lower the dose required, and the greater the effect that will be seen in the patient.

The full text is available to subscribers and the abstract can be viewed online at http://www.nature.com/nature/journal/vaop/ncurrent/abs/nature05865.html

Rumor vs. Truth

Rumor: Generic Oxycontin is going off the market.

Truth: It looks like this may be the case. Endo Pharmaceuticals challenged three of Purdue's patents on *Oxycontin* before they were set to expire. An initial court ruling was that the patents weren't enforceable, opening the door for generics to start entering the market in 2004. But Purdue appealed soon after. This time it was ruled that Purdue's patents are valid, and that Endo's extended-release oxycodone products infringe the patents.

Endo and Watson have already stopped selling their generic versions of *Oxycontin*. Teva's supply is expected to run out by the end of the year. Impax is still manufacturing an extended-release oxycodone that is distributed by Dava Pharmaceuticals. But they are currently in a patent litigation with Purdue and most experts doubt that Impax will win. If the generics go away, patients will have to pay higher prices again.

Purdue is currently negotiating with third party payers to encourage reasonable co-pays for *Oxycontin*. They will also be offering discount cards through physicians and pharmacists that patients can use to reduce their out-of-pocket costs at the pharmacy. Purdue also has a patient assistance program to provide *Oxycontin* to eligible low-income patients. Generics are not expected to return until 2013, when the last patent on *Oxycontin* expires.

Aspirin...continued from Page 2

on delaying cognitive decline. Women who took aspirin did not differ in three assessments of cognition at the initial assessment at 5.6 ears (mean difference, -0.01; 95% CI, -0.04 to 0.02), nor at the final assessment at 9.6 years (mean difference 0.01; 95% CI, -0.02 to 0.04).

Since aspirin has been shown to reduce the short-term risk of colorectal adenomas in patients with a previous history, two large randomized trials with follow-up for more than 20 years were evaluated for primary prevention of colorectal cancer. Patients who received incidence of colorectal cancer, but this effect was demonstrated only after a latency period of 10 years. Results for lower or less frequent doses of aspirin were inconsistent.

Similar results come from the Cancer Prevention Study II Nutrition Cohort, which followed for up to 12 years a relatively elderly population of 69,810 men and 76,303 women. Daily use of adult-strength aspirin (doses of at least 325 mg daily) for 5 or more years was associated with reduced risks of overall cancer (incidence lowered by 16%) and prostate cancer (19%) among men and of colorectal cancer among men and women combined (32%)

Article from Apha Drug*Info*Line, April 2007

Nurse Labor Shortage...continued from Page 1

more likely to pursue higher academic degrees in nursing, researchers found. Federal health officials have estimated that an additional 360,000 RNs will be needed by the U.S. Heathcare system by 2020. Growing demands for long-term care will require the equivalent of 800,000 more direct care workers by 2010, testified Alan Rosenbloom, president of the Alliance for Quality Nursing Home Care, earlier this year before the National Commission for Quality Long-Term Care. Thousands of those will be RNs.

Last year, nursing schools nationwide rejected tens of thousands of nurse-student applicants, largely due to an insufficient number of faculty members.

Article from MLTCN, *June 2007*

NutritionUpdate

Identifying Common Ailments: Signs and Symptoms

According to Levenson and Crecelius (*Caring for the Ages*, 2003), the most common type of URI found in SNF patients is pneumonia caused by *Streptococcal pneumonae*, followed by *Haemophilus influenzae* and *Moraxella catarrhalis*. Frequently reported nursing facility-acquired pneumonias also include aspiration flora viruses, *Staphylococcus aureus*, and aerobic gram-negative rods, say Meehan, Chua-Reyes, Tate, *et al*. (*Chest*, 2000).

According to the Web site, About: Lung Disease (http://lungdiseases.about.com), key signs and symptoms of pneumonia that CNAs should learn to recognize include cough that brings up a greenish or yellowish mucous, fever and chills, stabbing or sharp chest pains that worsen during deep respiration, rapid or shallow breathing, shortness of breath, headache, excessive sweating and skin that is clammy to the touch, loss of appetite, severe fatigue, and altered mental status or confusion.

In conjunction with pneumonia, UTIs are also common among the Medicare-age population living in SNFs. While *E-coli* is the most common type of pathogen identified in UTIs, other bacterial pathogens commonly seen in older patients include *Proteus mirabilis, K. Pneumoniae, Pseudomonas, enterococcius*, and coagulase-negative *staphylococci*.

The most common predisposing factors for UTIs in elderly patients are incomplete emptying of the bladder, associated with conditions such as benign prostatic hypertrophy (BPH); prostatitis; and urethral strictures. Additional factors include bowel incontinence, decreased mobility, use of indwelling urinary catheters, and lack of adequate fluids. The Web site, Urology Channel (www.urologychannel.com) lists many of the most common signs and symptoms of UTIs in the elderly patients, including back pain, blood in the urine, cloudy urine, inability to urinate despite the urge, fever, frequent need to urinate, general discomfort (malaise), altered mental status, confusion, and painful urination.

Article from Provider*, March 2007*