Lifespan Adopts ED Guidelines to Curb Opioid Misuse and Abuse

PROVIDENCE – As the number of unintentional overdoses involving prescription drugs continues to climb in the U.S. and especially in Rhode Island, emergency medicine physicians from throughout the Lifespan health system are formalizing the way they treat chronic pain to limit opioid medication misuse and abuse.

Lifespan, the state's largest health system, has implemented a formal set of guidelines for its emergency departments at Newport Hospital, The Miriam Hospital and Rhode Island Hospital that sets the stage for treatment of chronic non-cancer pain to limit inappropriate use of opioids and better coordinate care with the patient's primary care physician.

"Deaths from accidental prescription drug overdose and narcotic addiction have become a major public health problem," said **BRIAN ZINK, MD**, chief of emergency medicine at Rhode Island and The Miriam hospitals. "Unfortunately, more people die from opioid medication overdose than from automobile accidents. Just last year, more than 180 Rhode Islanders died from an unintentional overdose, the majority from prescriptions drugs.

He continued, "Every day, coming through the doors of our emergency departments, there are people in pain who need treatment, but also people who are addicted to narcotic medications. Our clinicians have a duty to responsibly care for both groups. For those who are addicted and seeking opioids in the emergency department, prescribing more narcotics is not good care."

Because of the severity of the issue of opioid abuse in Rhode Island (the state is ranked as having the 13th highest drug overdose mortality rate in the country, as well as the highest in New England), the state Department of Health is supportive of the work being done by Lifespan.

"Prescription drug overdose death is the leading cause of premature death in adults in Rhode Island," said **MICHAEL FINE, MD**, director of the Rhode Island Department of Health. "These Lifespan guidelines, along with physician use of the prescription monitoring program every single time they prescribe narcotics and other powerful drugs will go a long way toward stopping this epidemic."

At Lifespan, the decision to move toward a defined guideline began in the emergency department at Newport Hospital. "We watched as more and more people came into our emergency department asking for opioid pain medication. Many of these patients have a very legitimate need for pain relief," said **GLENN HEBEL, MD**, Newport Hospital's chairman of the department of emergency medicine. "Unfortunately, many other patients are not using these medications appropriately, and this can turn into a dangerous or even deadly problem. In the ED, we are at a crossroads for people seeking these medications and it means we are also well positioned to implement guidelines that can really make a difference."

While Newport Hospital worked on its guidelines, the emergency departments at Rhode Island Hospital and The Miriam Hospital, which are staffed by physicians from University Emergency Medicine Foundation, began working on their own set of guidelines through the efforts of **TOM HARONIAN, MD**, **LIBBY NESTOR, MD**, and **JASON HACK, MD**. Realizing strength came through a system approach, the two groups began working together to develop a single guideline that could be used throughout Lifespan and serve as a model for the state.

The Lifespan Emergency Department Opioid Guideline is for chronic non-cancer pain, and includes limiting the amount of opioid pain medication provided on discharge and encouraging patients to get refills from the provider who ordinarily prescribes the medication rather than the emergency medicine physician. Physicians are also encouraged to refer patients with suspected substance abuse behavior for appropriate treatment and to provide patients with information about the addictive nature and potential misuse of these medications. Emergency physicians are also using Lifespan electronic health records and state prescription monitoring databases to identify patterns of opioid misuse in patients.

Dr. Zink estimates that at the Rhode Island Hospital Anderson Emergency Center and The Miriam Hospital Emergency Department, 15 to 20 patients per day present seeking opioid medications – people who are either addicted to opioids or who want to sell these prescription medications to others. ❖

Aquidneck Medical Associates Merge with University Medicine Foundation

University Medicine also in discussions with other RI physician groups

PROVIDENCE – Aquidneck Medical Associates and University Medicine Foundation merged operations effective January 1, 2014. The new medical group will include 185 physicians and 200 staff who will serve more than 100,000 patients throughout most of Rhode Island.

KEIVAN ETTEFAGH, MD, president of Aquidneck Medical Associates, said, "We expect that in the near future this merger to bring high quality specialty care closer to the residents of Newport and Portsmouth. It will allow us to expand on our 50-year tradition of great service, and soon patients will no longer have to cross two bridges and drive 30 miles to reach many specialists." Aquidneck Medical Associates is comprised of 11 primary care physicians and 38 support staff.

University Medicine has 15 locations throughout the state that offer primary care and 10 different medical specialties. University Medicine is an independent group which is affiliated with Brown University and Lifespan Health System. **Lou Rice, MD**, president of University Medicine Foundation, said, "The combined operations will allow us to expand services to more patients, participate in new programs with insurers, enhance our technology and improve administrative services."

Joining University Medicine will enable Aquidneck to offer innovative clinical care such as their patient-centered medical homes (PCMHs); and will enhance its ability to participate in new healthcare models under the Affordable Care Act, such as accountable care organizations (ACOs).

University Medicine also has made it a priority to add more primary care physicians, which is critical given the current and projected shortage of access to primary care providers. Dr. Rice said, "The opportunity to affiliate with a high quality group like Aquidneck comes at the right time. We'll be better able to participate in new models of care that will give patients better service and access to care while keeping healthcare costs under control."

University Medicine is also in discussions with other physician groups in Rhode Island. Dr. Rice commented, "Our flexible approach makes us attractive to medical groups who want the administrative and support services we can provide, but who also want to maintain some autonomy in their operations, staffing, and clinical care delivery." ❖

Cigna adds Kent to network

WARWICK – Cigna and Kent Hospital have entered into a multi-year contract that adds the hospital and its employed physicians to Cigna's network of participating hospitals and doctors in Rhode Island. The agreement became effective December 1, 2013.

Cigna customers who receive health care services from Kent Hospital or its doctors will now be covered at the in-network benefit level, according to the terms of their health care benefits plan. ❖

MIRIAM HOSPITAL

Philip Chan, MD, with patient.

Miriam Hospital launches new HIV prevention program

PrEP program offers daily pill that can help prevent HIV infection

PROVIDENCE – The Miriam Hospital Immunology Clinic has launched the pre-exposure prophylaxis, or PrEP program, which offers a single, daily pill to Rhode Islanders at higher risk for HIV exposure.

PHILIP CHAN, MD, of The Miriam Hospital's Division of Infectious Diseases, is leading the PrEP program, one of the first clinical programs in the country to offer PrEP to at-risk patients in a clinical setting.

"The Miriam's PrEP program is designed to address the ongoing HIV epidemic in the state," said Dr. Chan. "Given that Rhode Island is a small state with a relatively close community, PrEP in combination with other available HIV prevention strategies, offers the chance to reduce the number of new HIV diagnoses to near zero in the future."

For Rhode Islanders who are HIV-negative and at higher risk, PrEP can help prevent them from becoming infected. Higher risk groups include gay, bisexual, and other men who have unprotected sex with one or more men a year, and both HIV-negative men and women in a relationship with an HIV-positive person.

"While PrEP does offer an additional layer of protection, it's not 100 percent effective. Condoms, the easiest prevention mechanism, should still always be used," said Dr. Chan. "The PrEP program is part of our larger HIV/STD prevention program, which offers free testing to avoid the spread of sexually transmitted diseases." ❖

Research News

Oncologist publishes research on ovarian cancer survival rates

W&I

Richard G. Moore, MD

PROVIDENCE – **RICHARD G. MOORE, MD**, director of the Center for Biomarkers and Emerging Technologies and a gynecologic oncologist with the Program in Women's Oncology at Women & Infants Hospital, is part of a team of researchers who published an article on the use of a chemoresponse assay to guide the treatment of women with persistent or recurrent ovarian cancer.

The article was published in the November issue of *Gynecologic Oncology* and illustrates how the team's use of a chemoresponse assay on tissue samples from ovarian tumors can help tailor the most effective treatment for them.

Dr. Moore, who is also a professor of obstetrics and gynecology at The Warren Alpert Medical School, and the team spent eight years studying the assay's effectiveness in choosing course of treatment in women with platinum-sensitive and platinum-resistant tumors. Such tumors do not respond to many types of treatment and are labeled "persistent," or they return after treatment, making them "recurrent."

The publication capped the release of the results of the eight-year study, which showed that women diagnosed with ovarian cancer who undergo cancer tumor testing to determine the best treatment have better survival rates than women who do not.

"We demonstrated that using a tissue sample from the woman's tumor and a chemoresponse assay can help us determine the best treatment for her," Dr. Moore said. "Such testing allows us to identify the chemotherapeutics that are active against the individual patient's disease and those that are not, which would result in decreased toxicity from ineffective treatments."

The use of such personal-directed therapies increases overall survival, making the results of this work by Dr. Moore and his team the first in two decades to show a significant impact on ovarian cancer survival. The work was key in light of the fact that epithelial ovarian cancer is the leading cause of gynecologic cancer deaths in the United States.

"Despite the achievement of high response rates, improvements in survival with aggressive surgical debulking and the use of platinum/taxane combination chemotherapy, the disease recurs in the majority of the patients," Dr. Moore explained.

The study was launched in 2004 and included 262 evaluable women. Their biopsies were successfully treated in vitro, or in a test tube. The assay ChemoFx® by Precision Therapeutics tested up to 15 approved treatment regimens on the samples, identifying chemotherapy drugs and regimens to which each tumor might be sensitive. The study was non-interventional, meaning that physicians chose the treatment regimens without knowing the assay results.

"The assay identified at least one treatment to which the tumor would be sensitive in 52% of patients in the study," Dr. Moore said. "At the same time, it is interesting to note that no single treatment accounted for more than 30% of the treatments assessed in this study, demonstrating the lack of a standard care in this patient population."

Median survival for the women in the study was 37.5 months for patients with treatment-sensitive tumors, compared to 23.0 months for intermediate and resistant tumors.

Dr. Terek gets $1.4M NIH grant to study bone cancer

BROWN

Richard M. Terek, MD

PROVIDENCE – **RICHARD M. TEREK, MD, FACS** has been awarded a $1.4 million research grant from the National Cancer Institute of the National Institutes of Health to study bone cancer.

The research will be focused on mechanisms to develop new therapies and strategies to prevent metastasis of chondrosarcoma based on microRNA and nanotechnology. The grant is an R01 grant, the original and oldest grant mechanism used by the National Institutes of Health. "R01 grants from the National Institutes of Health are highly competitive, and there are very few orthopaedic surgeon – scientists who are successful at competing for these grants," says Dr. Terek.

"The research environment and collaborators in the Orthopaedic Research Laboratories, built and expanded over the years by philanthropy, prior grants, and the department, all contribute to the success of our research program," said Dr. Michael Ehrlich, Chairman of the Department of Orthopaedic Surgery at the Alpert Medical School and CEO of University Orthopediccs, Inc. ❖

Research News

Presurgery Treatment Combo More Effective for Women with Triple-Negative Breast Cancer

PROVIDENCE – Adding the chemotherapy drug carboplatin and/or the antibody therapy bevacizumab to standard presurgery chemotherapy increased the number of women with triple-negative breast cancer who had no residual cancer detected at surgery, according to results of a randomized, phase II clinical trial presented at the 2013 San Antonio Breast Cancer Symposium, held December 10–14, 2013.

An increasing number of patients with triple-negative breast cancer are receiving chemotherapy before surgery, a treatment approach called neoadjuvant chemotherapy. In about one-third of these patients, no identifiable cancer cells are found in breast tissue and lymph nodes removed at surgery performed after the neoadjuvant chemotherapy. These patients are said to have had a pathologic complete response and have a much lower risk of cancer recurrence compared with patients whose cancers do not respond this well to the neoadjuvant chemotherapy.

"Our study was designed to find out if adding either carboplatin or bevacizumab to standard preoperative chemotherapy would increase the percentage of patients in whom cancer is eliminated before surgery," said **WILLIAM M. SIKOV, MD, FACP**, associate professor of medicine at the Alpert Medical School. "We are excited to report that adding either therapy significantly increased the percentage of patients in whom cancer was eliminated from the breast, and that adding both was even more effective.

"While our results show increases in pathologic complete response rates with both carboplatin and bevacizumab, we do not yet know how large an impact, if any, these differences will have on cancer recurrences or deaths. Although the study is not large enough to detect significant differences in these endpoints, we plan to follow patients for 10 years after their surgery to see if patient outcomes suggest long-term benefits from the investigational treatments."

Sikov and colleagues treated 443 patients with operable, stage 2 or 3 triple-negative breast cancer in the randomized, phase II clinical trial. The study was conducted by the Cancer and Leukemia Group B, which is now part of the Alliance for Clinical Trials in Oncology, and is called CALGB/Alliance 40603. Patients were randomly assigned to standard neoadjuvant chemotherapy, standard neoadjuvant chemotherapy plus carboplatin, standard neoadjuvant chemotherapy plus bevacizumab, or standard neoadjuvant chemotherapy plus carboplatin and bevacizumab. Surgery was performed from four to eight weeks after the completion of neoadjuvant treatment.

The researchers found that among the 108 patients who were randomly assigned to standard neoadjuvant chemotherapy alone, at surgery, cancer had been eliminated from the breast in 42 percent of these patients and from both the breast and lymph nodes in 39 percent. These proportions increased to 50 percent and 43 percent, respectively, for the 110 patients who were randomly assigned to standard neoadjuvant chemotherapy plus bevacizumab; 53 percent and 49 percent, respectively, for the 113 patients who were randomly assigned to standard neoadjuvant chemotherapy plus carboplatin; and 67 percent and 60 percent, respectively, for the 112 patients who were randomly assigned to standard neoadjuvant chemotherapy plus carboplatin and bevacizumab.

W&I

William M. Sikov, MD

The increases in the pathologic complete response rates in the breast and in the breast and lymph nodes observed among patients randomly assigned to standard neoadjuvant chemotherapy plus carboplatin were statistically significant. Among patients randomly assigned to standard neoadjuvant chemotherapy plus bevacizumab, only the increase in the pathologic complete response rate in the breast met the study's criteria for significance.

"Patients who were treated with carboplatin had more problems with low blood counts and were more likely to miss doses of chemotherapy or to have their chemotherapy treatments delayed or the doses of the chemotherapy drugs reduced compared with patients who did not receive carboplatin," said Dr. Sikov. "In addition, about 10 percent of patients who were treated with bevacizumab developed high blood pressure and more of these patients had problems with blood clots, bleeding, and infections."

This study was funded by the National Institutes of Health, Genentech, and the Breast Cancer Research Foundation. ❖