

FDA Patient Safety News: Show #106, January 2011

Update on Femur Fracture Risk with Bisphosphonates

The FDA has issued updated information on atypical fractures of the femur associated with the use of bisphosphonates to treat osteoporosis. These drugs include Fosamax (alendronate sodium), Actonel (risedronate sodium), Boniva (ibandronate sodium), Atelvia (risedronate sodium), Reclast (zoledronic acid), and their generic equivalents.

The femur fractures seen with bisphosphonates have been subtrochanteric and diaphyseal, which are uncommon --- accounting for less than one percent of the hip and femur fractures that occur in the population overall. Although it is not clear that the drugs are a direct cause of these unusual fractures, they have mainly been reported in patients taking bisphosphonates.

FDA recommends that healthcare professionals:

- be aware of the possibility of atypical femur fractures in patients taking bisphosphonates
- rule out a femoral fracture if a patient presents with new thigh or groin pain, and discontinue potent anti-resorptive medications, including bisphosphonates, in patients who have evidence of a femoral fracture.
- consider periodically re-evaluating whether continued bisphosphonate therapy is needed, especially in patients who have been treated for more than five years. Periodic reevaluation is recommended because the fracture reduction efficacy of these drugs has not been established, and the optimal duration of use is uncertain.
- discuss the benefits and risks of these drugs with patients, and instruct them to seek medical attention if they experience new groin or thigh pain, which may be described as dull or aching. This pain can occur weeks or months before a complete fracture occurs.

This safety information will appear in the drugs' labeling, as well as in a Medication Guide that will be distributed to patients with each prescription.

Additional Information:

FDA MedWatch Safety Alert. Bisphosphonates (Osteoporosis Drugs): Label Change - Atypical Fractures Update. October 13, 2010.

<http://www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm229244.htm>

Recall of Actavis Fentanyl Patches

Actavis is recalling certain lots of the company's fentanyl transdermal patches because they may release the active ingredient faster than they should. An accelerated release of fentanyl, a strong opioid narcotic, could lead to adverse events such as excessive sedation and respiratory depression.

The recall covers 25 mcg/hour patches from certain lots. Wholesalers and retailers who have patches from the recalled lots should return them to the company. Actavis is also asking patients to return any recalled product they have. Contact Actavis at 1-888-896-4562 to arrange for a return.

Additional Information:

FDA MedWatch Safety Alert. Fentanyl Transdermal System: Recall - Potential for Active Ingredient to Release Faster Than Specified. November 5, 2010.
<http://www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm230639.htm>

New Precaution when Calculating Carboplatin Doses

FDA is informing oncologists that recent changes in how serum creatinine is measured could lead to the wrong carboplatin dose.

All clinical labs in the U.S. will soon be using a newly standardized method to measure serum creatinine -- Isotope Dilution Mass Spectroscopy (IDMS). Compared to older methods, IDMS appears to underestimate serum creatinine levels when serum levels are relatively low, for example, around 0.7 mg/dL. This could result in overestimating the Glomerular Filtration Rate (GFR) in some patients with normal renal function. And that in turn could lead patients being given a carboplatin dose that's higher than needed, which increases the risk of drug toxicity.

To avoid this possibility, FDA recommends that when GFR is estimated based on serum creatinine using the IDMS method, the carboplatin dose should be capped. The maximum dose should be based on a GFR estimate of no more than 125mL/min for patients with normal renal function.

Capping the dose is not necessary when the patient's renal function is assessed using actual GFR measurements. In these cases, carboplatin can be safely dosed according to the instructions in the drug's labeling.

Additional Information:

ISMP Medication Safety Alert! Community/Ambulatory Care Edition. Lab Change May Affect CARBOplatin Dosing. October 2010.
<http://www.ismp.org/newsletters/ambulatory/issues/community201010.pdf>

Update on Radiation Overdoses from CT Perfusion

The FDA has issued an update on its continuing investigation of excessive radiation exposure from CT brain perfusion scans, including expanded recommendations for radiology personnel performing these procedures.

FDA is now aware of 385 patients who received overdoses from these scans in six hospitals. It is well known that some of the patients received doses high enough to produce hair loss and erythema.

But it is important to keep in mind that if a patient's radiation dose is higher than the expected level, but not so high as to produce obvious signs of radiation injury, the problem could go undetected and unreported, increasing the risk of long-term radiation effects such as cancer.

FDA has inspected the manufacturers of the CT equipment used in the overdose cases, and has concluded that the scanners in question do not produce overexposures when they're used according to the manufacturers' specifications, and that the manufacturers did not modify their use protocols to cause the overexposures. FDA believes it is likely that the overexposures resulted from use errors by radiology personnel.

FDA has expanded its December 2009 recommendations on how radiology personnel can help avoid overexposures.

First, be certain that technologists are trained on the specific scanner and for the specific imaging protocol they are using. They should understand the meaning of the dose index reported on the CT control screen, as well as the expected ranges for each imaging protocol and body scan region.

Second, be sure that CT operators are trained on dose-saving features such as automatic exposure control before using them. If the user activates such features without reviewing and adjusting the associated

parameters, the default values may not be appropriate for that scan, which could lead to either overexposure or underexposure.

FDA also recommends that each facility set its own alert level for brain perfusion studies.

Additional Information:

FDA Medical Device Safety. Safety Investigation of CT Brain Perfusion Scans: Update. November 9, 2010.

<http://www.fda.gov/MedicalDevices/Safety/AlertsandNotices/ucm185898.htm>

Diabetes/Cardiovascular Risk with Prostate Cancer Drugs

The labeling for Gonadotropin-Releasing Hormone (GnRH) agonists is being updated to describe an increased risk of diabetes and certain cardiovascular diseases in patients being treated for prostate cancer. GnRH

agonists are sold under a variety of brand names, including Lupron (leuprolide acetate), Zoladex (goserelin acetate), Trelstar (triptorelin pamoate), Viadur (leuprolide acetate), and Eligard (leuprolide acetate).

FDA is requiring that the manufacturers add this safety information to the product labels based on the Agency's review of several published studies. Most of these studies reported small, but statistically significant increased risks of diabetes and/or cardiovascular events in patients receiving these drugs. Although the risk appears to be low, healthcare professionals should evaluate their patients' risk factors for these diseases, and carefully weigh the drugs' benefits and risks when deciding on treatment for prostate cancer.

Patients being treated with these drugs should have their blood glucose and/or glycosylated hemoglobin monitored periodically. Healthcare professionals should also monitor patients for signs and symptoms of cardiovascular disease and manage them accordingly.

Additional Information:

FDA MedWatch Safety Alert. GnRH Agonists: Label Change - Increased Risk of Diabetes and Cardiovascular Disease (Update). October 20, 2010.
<http://www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm230359.htm>

New Pediatric Dosing Recommendations for Valcyte

FDA is notifying healthcare professionals about updated pediatric dosing recommendations for Valcyte oral tablets and solution. Valcyte is an antiviral medication used to prevent cytomegalovirus (CMV) disease in pediatric patients who have undergone kidney or heart transplants. The dosing change was made to prevent potential overdosing in children with low body weight, low body surface area, or below-normal serum creatinine.

Here are some of FDA's recommendations to help prevent overdoses:

- Follow the updated pediatric dosing algorithm in the Valcyte label.
- If the calculated pediatric dose of Valcyte exceeds 900 mg, give the child a dose of only 900 mg.
- And advise patients to contact their healthcare provider immediately if they experience signs and symptoms of overdose, including abdominal pain, vomiting, diarrhea, and seizure.

Additional Information:

FDA MedWatch Safety Alert. Valcyte (valganciclovir hydrochloride) Label Change: Possible overdose in pediatric patients. September 15, 2010.
<http://www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm225888.htm>

Alarming Monitor Problems

An FDA article in the journal Nursing2009 describes problems that can arise with the use alarms on patient monitoring equipment. From 2005 through 2008, FDA received 566 reports of patient deaths related to the alarms on monitoring devices. Part of the problem is that alarms can very easily be disabled or silenced. Also, it is easy to overlook onscreen symbols indicating that an important alarm feature is not turned on or available. In many of the FDA reports, users were not familiar with how the monitoring equipment worked, or hadn't checked the monitor's alarm status.

In one case, a patient on continuous cardiac monitoring experienced ventricular fibrillation and died without her monitor sounding or displaying an alarm. It turned out that although the monitor detected the problem, its dysrhythmia processing had been turned off.

And in another case, an infant died when staff members did not notice a visual alarm on the screen of the perinatal monitor, warning that the child's heart rate was outside the defined parameters. The equipment had not been set up to provide audible alarms.

Here are some of the things FDA recommends to avoid alarm-related patient injuries and fatalities.

- Do not silence alarms without first checking on the patient.
- Make sure that all patient alarms are appropriately activated and not suspended, that dysrhythmia detection functions are available and appropriately activated, and that the alarm volume is high enough to be heard outside the patient's room. Perform these checks when assuming care of patients from colleagues, after shift changes, and after patients are transferred.
- Become familiar with all monitor functions, especially dysrhythmia alarms and icons on the screen, and the meanings of various alarm sounds.
- Make sure that new staff members, including travel and float nurses, are adequately trained on the unit's monitors before they care for patients.

Additional Information:

FDA Medical Device Safety. Alarming monitor problems. September 2009.

<http://www.fda.gov/MedicalDevices/Safety/AlertsandNotices/TipsandArticlesonDeviceSafety/ucm222022.htm>

Avoiding Patient Injuries with Resectoscopes

Resectoscopes are devices used to remove tissue during endoscopy procedures. Unless they are assembled properly before each procedure, these devices can fail. For example, FDA has a report about a 2-month-old infant undergoing cystoscopy to incise a ureterocele. The insulation slipped off the sheath of the resectoscope, and exposed the hook electrode. Fortunately, the child was not injured. The resectoscope, made by the Richard Wolf Medical Instruments Corporation, had not been assembled in the correct sequence.

Assembling this particular resectoscope requires that several vital steps be performed in the correct order. Check the user manual for specific instructions that apply to your resectoscope, and contact the manufacturer if you need help assembling it.

As a reminder, FDA encourages people to report any problem with a medical device through MedWatch, the FDA's adverse event reporting program.

Additional Information:

FDA Medical Device Safety. Resectoscopes for Infants and Babies. September 24, 2010.

<http://www.fda.gov/MedicalDevices/Safety/AlertsandNotices/TipsandArticlesonDeviceSafety/ucm227105.htm>

Stop Using Hyland's Teething Tablets

FDA is warning people not to use Hyland's Teething Tablets because they may pose a risk to babies and children. The product, which is being recalled by the manufacturer, is intended to temporarily relieve a child's teething symptoms.

Hyland's Teething Tablets are a homeopathic product sold over the counter and on the Internet. The tablets

are supposed to contain only a very small amount of belladonna, which comes from a plant. Throughout history, belladonna has been used as both a poison and a medicine. Large amounts of belladonna can be very toxic.

FDA laboratory testing has shown that the teething tablets have varying amounts of belladonna, in some cases much more than they should. FDA has received reports of children who've experienced serious harmful effects, like those seen with belladonna toxicity, after being given these tablets.

So the bottom line is this: do not give your child Hyland's Teething Tablets, and if you still have any on hand, discard them right away.

Additional Information:

FDA MedWatch Safety Alert. Hyland’s Teething Tablets: Recall - Risk of Harm to Children. October 23, 2010.
<http://www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm230764.htm>
