MEDICAL PHARMACIES
DRUG INFORMATION AND NEWS FOR HEALTH CARE PROVIDERS
TABLET
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ALISKIREN CONTRAINDICATED IN DIABETICS TAKING AN ACE INHIBITOR OR AN ARB

Dual therapy with aliskiren (Rasilez®) and either an ACE (angiotensin converting enzyme) inhibitor or an ARB (angiotensin receptor blocker) may increase adverse events (e.g. hyperkalemia, renal complications and non-fatal stroke) in patients with diabetes. An interim analysis of the ALTITUDE (Aliskiren Trial in Type-2 Diabetes Using Cardio-Renal Disease Endpoints) trial was terminated when these serious adverse outcomes became apparent. The manufacturer of aliskiren (Rasilez), in conjuction with Health Canada, has issued new safety information indicating aliskiren should not be taken by patients with diabetes who are also taking an ACE inhibitor or an ARB, nor should aliskiren be initiated in diabetic patients currently taking an ACE inhibitor or an ARB.

These drugs block different steps of the renin-angiotensin system and therefore may theoretically be an attractive combination to treat hypertension. Studies have shown that "dual therapy with ACE inhibitors and ARBs are associated with elevated risks for acute kidney injury and hyperkalemia" and don't improve outcomes. A meta-analysis of several studies involving more than 4800 people showed there was a significantly higher risk for hyperkalemia (but not acute kidney injury) in patients taking aliskiren plus an ACE inhibitor or an ARB.

The ALTITUDE trial involved patients with diabetes who, at baseline, have a higher risk of cardiovascular or renal events. It was "designed to evaluate the potential benefits of aliskiren (in more than 8600 patients) in reducing the risk of cardiovascular and renal events". The preliminary analysis of the ALTITUDE trial "concluded that the study patients were unlikely to benefit from aliskiren" and experienced a higher incidence of adverse events.

It's expected that a further review of the ALTITUDE trial data will result in an updated Canadian monograph later in 2012. ■

OPIOIDS & HORMONE EFFECTS

A common side effect, but perhaps not a well-known one, is an opioid's effect on the release of hormones from the hypothalamus or pituitary gland. An opioid can potentially influence hormone release in many ways. For example it is not known if one opioid is more likely to influence hormone levels than another or if the dose, duration of use and the route of administration might make a difference.

Opioids may potentially affect the following hormones:

Growth hormone- Morphine 15 mg can acutely increase growth hormone secretion; however, in some patients chronic intrathecal opioid administration can lead to growth hormone deficiency.

Prolactin- Increased prolactin levels resulting in galactorrhea may occur with chronic opioid use. Testosterone secretion may be reduced.

Thyroid Stimulating Hormone (TSH)- TSH may be increased or decreased by opioids.

Adrenal Corticoids- Opioids can decrease release of adrenocorticotropic hormones blunting response to acute stress. "Some patients may experience overt adrenal insufficiency".

Oxytocin- Opioids reduce oxytocin levels.

Insulin- Chronic opioids may reduce insulin secretion.

Luteinizing Hormone (LH) and Follicle Stimulating Hormone- Chronic opioids may decrease release of these hormones. "By reducing LH release, sex steroid (testosterone, estradiol) production is reduced. Opioids may also act directly on the gonads or suppress sexual behaviour by stimulating mu or sigma opioid receptors in the hypothalamus".

Hypogonadism and significantly reduced testosterone levels in men and scanty menstruation or amenorrhea in women is a common side effect of chronic opioid use. Other possible consequences of chronic opioids on hormones may include decreased libido, erectile dysfunction, menstrual irregularities, hot flashes (in men and women), osteoporosis, fractures, infertility, depression, anxiety and low energy. Men may also experience muscle loss and weakness. ■

DRUG NEWS

OxyNEO® (oxycodone controlled release) 10, 15, 20, 30, 40, 60 & 80 mg tablets Purdue Pharma *(not currently a benefit of ODB)*

OxyNEO, a reformulated controlled-release form of OxyContin®, is intended to reduce abuse, tampering and misuse. The new tablets are harder to cut, chew, break or crush and form a viscous gel upon contact with water making it more difficult to abuse by snorting or dissolving the tablet to administer by injection. OxyNEO replaces OxyContin (which was recently discontinued by the manufacturer).

OxyNEO is available in fewer strengths than OxyContin (e.g. the 5, 120 and 160 mg strengths are not available in the reformulated product). As with OxyContin, OxyNEO must be swallowed whole, not chewed, crushed or broken. If the integrity of the tablet is disturbed and administered, rapid release and absorption of the tablet may occur, potentially resulting in a fatal dose of oxycodone.

Other important points to note about OxyNEO are as follows:

- OxyNEO tablets are bioequivalent to OxyContin when given in equal doses; however the peak concentration is slightly higher and the time to reach peak levels is slightly delayed. Although this is not expected to be clinically significant, some patients may perceive the new tablets to be less effective or may experience more adverse effects.
- It is very important NOT to pre-soak, lick or otherwise wet the tablet prior to placing it in the mouth. The gummy gel that forms once the tablet is wet makes the tablets more difficult to swallow and increases the chance of choking, gasping and regurgitation of the tablet. Therefore, OxyNEO tablets should be taken one tablet at a time (if the patient is taking multiple tablets at once). After placing the tablet in the mouth the patient should IMMEDIATELY follow with sufficient water to ensure complete swallowing.
- OxyNEO should not be taken by patients with swallowing difficulty or in patients with narrowing of the esophagus.
- OxyNEO should not be administered via nasogastric, gastric or other feeding tubes. Doing so may cause obstruction of the tubes.
- Patients with known or suspected bowel obstruction, stricture or any disease or condition that affects bowel transit should not take OxyNEO. ■

Gelnique® (oxybutynin Cl) 10% Gel Watson Pharma *(not currently a benefit of ODB)*

Gelnique is a topical gel indicated in adults for the treatment of overactive bladder with symptoms of urge urinary incontinence, urgency and frequency. The transdermal gel avoids first-pass gastrointestinal and hepatic metabolism and is absorbed directly into the bloodstream through intact skin. It is thus less likely to cause dry mouth, constipation and drowsiness compared to oral oxybutynin.

The precautions, warnings and contraindications are as for oral oxybutynin. Concomitant use of Gelnique with alcohol may increase the incidence of drowsiness and use with other anticholinergics may increase the severity of dry mouth, constipation, blurred vision and other anticholinergeric effects (e.g. slowed gastrointestinal motility).

Adverse effects: dry mouth (6.9%), local skin reactions (1.8-2.1%), headache (1.5%), dizziness (1.5%), constipation (1.3%).

Dose, Administration & Availability: Immediately after opening, the content of 1 pouch is applied to dry intact skin on the abdomen, upper arms/shoulders or thighs once daily (avoiding exposure to recently shaved skin or areas with eczema, seborrhea or psoriasis). Open flames and smoking close to the application site should be avoided. Gelnique is supplied in cartons with 30, 1 gram single dose packets. ■

(Refer to the product monographs for complete information)

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References on Request
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