Olanzapine in the Treatment of Refractory Chronic Pain

Olanzapine (Zyprexa) may be an effective analgesic in selected patients with refractory non-cancer chronic pain. Olanzapine is an atypical antipsychotic drug which, at low doses, increases dopamine levels. Although dopamine is known to contribute to pain relief, the exact mechanism of action of pain relief has not been identified. Olanzapine’s effect on “histamine, adrenergic and other receptors could contribute to analgesic effects”. The sedative effect of olanzapine may also contribute to pain relief.

Literature citations from case reports and open-label studies have described olanzapine’s effect on pain in musculoskeletal, arthritis, headache and fibromyalgia pain. “All of the patients described received concomitant therapies, including one or more of the following drug classes: analgesics (e.g. acetaminophen, non-steroidal anti-inflammatory drugs, opiates), antidepressants (e.g. fluoxetine, sertraline, trazadone), anticonvulsants (e.g. gabapentin, benzodiazepines and muscle relaxants (e.g. tizanidine, cyclobenzaprine)”.

The doses of olanzapine reported in the case studies ranged from a low of 1.25 mg twice weekly to 2.5 mg to 20 mg daily at bedtime. Patients with cluster headaches resistant to treatment reported 60% to 100% pain relief within 30 minutes of dosing. Both the severity and total number of headache days decreased significantly. In the management of fibromyalgia, arthritis and musculoskeletal pain patients reported significant pain relief.

It should be noted that there have been no well-designed randomized controlled trials studying the effectiveness of olanzapine (or other atypicals such as risperidone or quetiapine) in the treatment of refractory non-cancer chronic pain. More study is needed to determine their role, if any, for this indication. The limitations of treatment with olanzapine include drowsiness and weight gain.

Psoriasis & Weight Gain May be Linked

Researchers evaluating data from the Nurses’ Health Study II found that the incidence of psoriasis increased in people reporting an increase in weight. A BMI of 21 to 22 was associated with a relative risk of developing psoriasis of 1.4 whereas a BMI of 30 to 34.9 was associated with a relative risk of 2.69. Patients who lost weight after gastric bypass surgery reported improvement in their psoriasis.

It is thought that obesity promotes the production of inflammatory substances (cytokines) which may explain this link.

Analgesic Use & Hypertension

An increased frequency of analgesic use appears to be associated with a higher risk of developing hypertension. Large studies involving men and women demonstrated that regular use of non-prescription analgesics (e.g. acetylsalicylic acid-ASA, ibuprofen and acetaminophen) 6 or 7 times weekly were more likely to develop hypertension than non-users. Acetaminophen use in men was associated with a 34% higher risk for hypertension; NSAIDs (non-steroidal anti-inflammatory drugs) were associated with a 38% higher risk and ASA use was associated with a 26% higher risk.

When evaluating a patient with new-onset hypertension, over-the-counter analgesic use may be a significant factor.

Fluconazolae May be Less Effective for Vaginal Infections in Women with Diabetes

Vaginal yeast infections are most often caused by the Candida albicans (C. albicans) species, however women with diabetes are more likely to be infected with the C. glabrata and C. krusei strains of Candida. Oral fluconazole (Diflucan) is effective in 70% to 90% of cases but the glabrata and krusei strains are resistant to fluconazole. An alternative treatment is boric acid suppositories inserted vaginally at bedtime for 2 weeks (followed by dosing twice weekly for 6 months to a year if required). Boric acid suppositories may be made by filling a gelatin “00” capsule with 600 mg of boric acid powder. Vaginal burning may occur early in treatment.
Product Briefs

Bio Gaia Drops (Lactobacillus reuteri protectis) Ferring
Bio Gaia is a probiotic used to restore balance in the digestive system. It is being promoted as a treatment for infant colic for babies of any age at a dose of 5 drops per day (equivalent to 100 million live active L. reuteri) until symptoms cease. The drops may be taken undiluted or mixed with food or a cool or warm (i.e. not hot) beverage. The product should be refrigerated and is expected to last about 25 days.

Differin XP (adapalene gel 0.3%) Galderma
Differin XP is indicated for the topical treatment of acne and is available in a 60 gram size. Differin 0.1% is still available. The product should not be used by pregnant women.

Rhinaris Sinomarin (hypertonic sea water nasal wash) PendoPharm
The product is designed to clean the nasal passages by removing crusts and excess mucus. The wash is available in an adult and pediatric format (125 ml size). The pediatric format (with a gentle spray) is for use in infants under 6 months of age.

TuZen Capsules (Lactobacillus plantarum) Ferring
TuZen is a probiotic indicated to reduce symptoms of irritable bowel syndrome (e.g. diarrhea, constipation, flatulence and abdominal pain). The recommended adult dose is 1 or 2 capsules daily with food. TuZen is available in packages of 30 capsules and may be stored at room temperature (below 20° C) or in the refrigerator. The product is not recommended for children.

Drug Changes

Benzaclin Topical Gel Pump (Sanofi Aventis)...New Delivery System
The pump format is available in a 50 gram size and replaces the 50 gram jar. The 25 gram jar is still available.

Ketek (telithromycin) Sanofi Aventis
... Change of indication
Ketek is no longer approved for the treatment of bronchitis, sinusitis or tonsillitis/pharyngitis due to its safety profile. It continues to be indicated for the treatment of community-acquired pneumonia of mild to moderate severity caused by susceptible organisms in patients 18 years of age and older.

Levaquin (levofloxacin tablets & injection) Janssen-Ortho
...Alternate dosing regimen
The new dose is 750 mg once or twice daily for 5 days as an alternative to 500 mg once daily for 10 to 14 days. This regimen is approved for the treatment of acute mild to moderate sinusitis caused by susceptible organisms.

Plan B tablets (levonorgestrel 0.75 mg) Paladin
... New single dose regimen
The new dose is two 0.75 mg tablets (for a total of 1.5 mg levonorgestrel) taken as a single dose within 72 hours of unprotected intercourse. The original dosing regimen was one tablet (0.75 mg levonorgestrel) taken in 2 doses 12 hours apart.

Resource Standard & Resource Plus (Novartis)
... Name change
These products will be renamed Boost 1.0 Standard and Boost 1.5 Plus Calories. There is no change in the formulation.

Congratulations to Jim Lawrence, our pharmacy manager at Durham Pharmacy in Port Perry. Jim received the 2006-2007 Wyeth Consumer Healthcare Bowl of Hygeia. The award recognizes his volunteer and professional service and its valuable impact on his community.