Official Newsletter for Idaho Medicaid Providers
Idaho Drug Utilization Review (DUR) Program
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The DUR Discovery

Exploring ways to improve pharmacotherapy

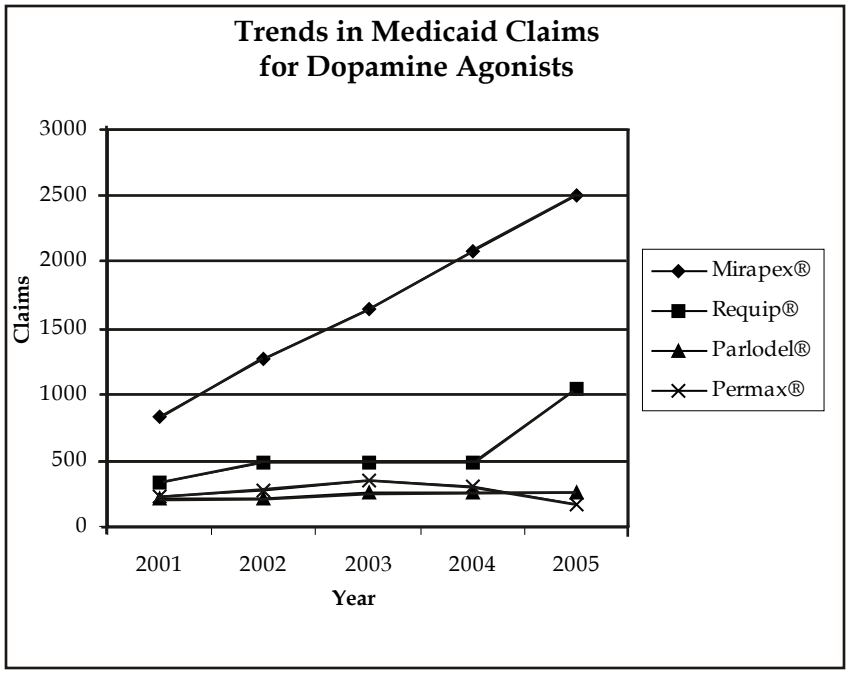
Dopamine Agonists and Sudden Onset of Sleep

By Eliza Borzadek, PharmD, and Chris Owens, PharmD, BCPS

Although the dopamine-receptor agonists (DA) pramipexole (Mirapex®), ropinirole (Requip®), and pergolide (Permax®) are FDA-labeled for the management of Parkinson's disease and may be utilized either alone or in combination with levodopa therapy, these agents are being increasingly used off-label for other motor-related disorders, including restless legs syndrome (RLS); of note in the past year, ropinirole became the first FDA-approved treatment for RLS.

All agents in the DA class, including less commonly used drugs such as bromocriptine and cabergoline, have been associated with patient reports of suddenly falling asleep during activities of daily living such as eating, driving, and engaging in conversation. This sudden irresistible somnolence may occur in the absence of any warning signs. Most of the available data comes from case reports and retrospective observational studies which suggest that this sudden onset of sleep (SOS) is not related to any specific DA, but is a class effect and may also occur with levodopa therapy alone. Even so, this problem has been considered significant enough to warrant a warning of sleep attacks in the package labeling of these agents and patients need to be aware of this risk.

Although SOS is rare with most data coming from Parkinson's patients, it is important that health care providers are aware of this potential adverse effect as more and more patients may be using these drugs for other conditions such as RLS. At this time, some of the reported predictors of SOS are increasing age, male gender, drug dosage, daytime sleepiness, and early arousals. Extreme caution is warranted with respect to driving or engaging in other potentially dangerous activities in patients with a history of dozing off in unusual circumstances.



In 2005, Idaho Medicaid spent over $440,000 on the DA class representing an increase of over $81,000 from

*(**Dopamine** continued on page2)*

CommunityAcquired Acute Sinusitis: To Treat or not to treat?

By Eliza Borzadek, PharmD and Chris Owens, PharmD, BCPS

Acute sinusitis is the fifth most common diagnosis resulting in antibiotic prescribing in primary care, although viral infection is the most common etiology. It presents many diagnostic and treatment challenges as only 2% of cases in adults and up to 13% in children are complicated by secondary bacterial infections. Uncomplicated viral sinusitis generally resolves in 7-10 days. In addition, most (75%) of acute bacterial sinusitis cases spontaneously resolve within one month.

In a recent review of Idaho Medicaid claims database, the majority of both pediatric and adult patients in 2005 received antibiotic treatment upon initial diagnosis of acute sinusitis. Greater than 90% of antibiotic claims occurred within 2 days of the initial office visit despite current recommendations to withhold antibiotic treatment for 7-10 days in most patients.

About 60% of Idaho Medicaid adult patients and 50% of pediatric population did not receive first-line antibiotic treatment as recommended by the most recent guidelines. In fact, fluoroquinolones represented about 10% of antibiotic claims for first-line treatment of acute sinusitis in adults.

General Guidelines for the Treatment of Community-Acquired Acute Sinusitis

Most cases of acute sinusitis resolve without antibiotics

If antibiotics are indicated:

- Empiric therapy should provide coverage for *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Moraxella catarrhalis* (mostly children)
- Narrow-spectrum antibiotics based on local sensitivity patterns are preferred to optimize patient outcomes while minimizing the selection of drug-resistant organisms
- Amoxicillin at usual dose 45mg/kg/day or high-dose 90mg/kg/day in two divided doses is recommended as first-line therapy in children
- Most guidelines recommend initiation of narrow spectrum antibiotics such as amoxicillin, doxycycline, or sulfamethoxazole-trimethoprim (Bactrim DS®) as first-line therapy in adults
- Antimicrobial therapy should usually be continued for an additional 7 days after the patient becomes free of symptoms (a minimum of 10 days)

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2004, due in part to increased utilization of ropinirole. Although pramipexole remains the most commonly prescribed agent, the number of claims for ropinirole doubled from 2004 to 2005.

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Cost Corner: Antihypertensive Agents

By Jenn Seeley, PharmD and Chris Owens, PharmD, BCPS

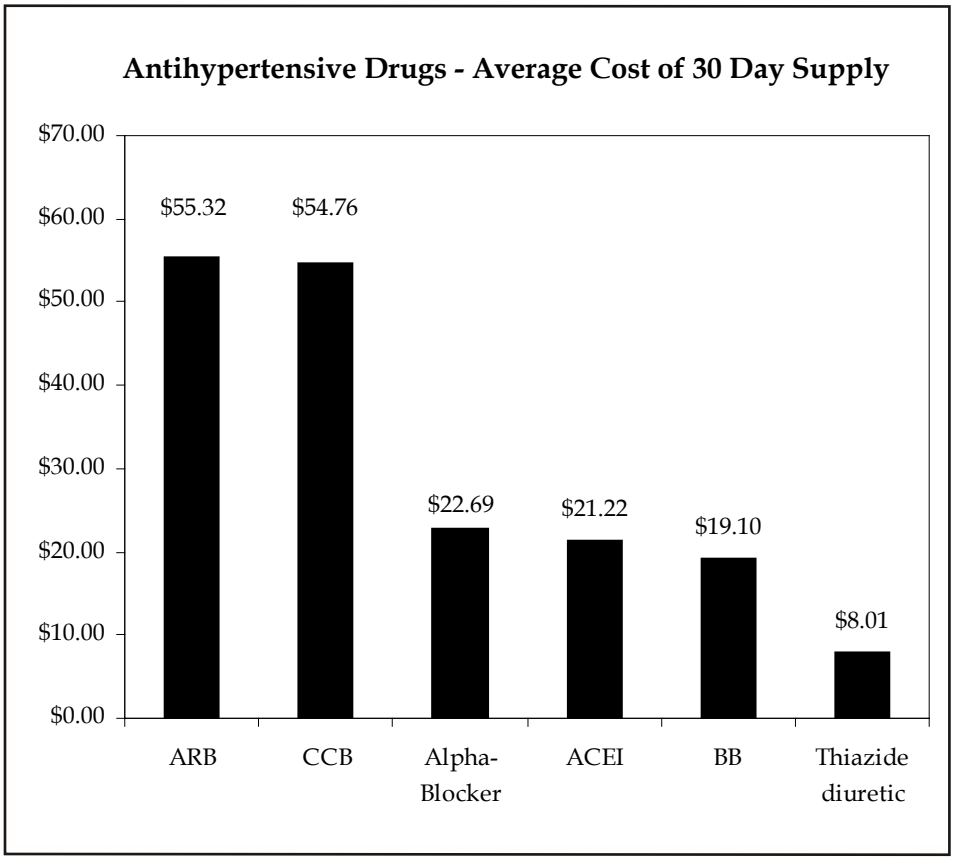
In May 2003, the Joint National Committee on the Prevention, Detection, Evaluation, and Treatment of High Blood Pressure published their seventh report (referred to JNC VII) to provide an evidence-based approach to managing this common condition. The highlights of JNC VII included:

- The BP goal for most patients is <140/90 mmHg
- A BP goal of <130/80 mmHg for patients with diabetes or chronic kidney disease
- Thiazide-type diuretics should be initial drug therapy for most patients
- Certain conditions are compelling indications for the initial use of an agent from other drug class (ACEI for diabetes, beta-blockers post MI, alpha-blockers for concomitant BPH, etc.)
- Most patients will require 2 or more antihypertensive medications to reach goal BP

In a recent review of the Idaho Medicaid database, it was determined that ACE inhibitors and beta-blockers were the most commonly prescribed initial therapy for hypertension. This is likely due to prescriber familiarity with these agents as well as their good tolerability for most patients. Interestingly, calcium-channel blockers (CCBs) such as amlodipine (Norvasc®) and angiotensin II receptor blockers (ARBs) such as losartan (Cozaar®) were also found to be commonly initiated agents in newly diagnosed hypertensive patients, despite the fact that few compelling indications exist for these agents and both classes are associated with higher economic costs.

For a full listing of Idaho Medicaid preferred agents go to **http://idahodur.isu.edu/preferred** and click on "Preferred Agent by Drug Class List."

Because of the many risks of hypertension, it is necessary to treat this condition aggressively, appropriately, and to recommended goals**. A thiazide-type diuretic should be used as initial drug therapy for most patients with uncomplicated hypertension.** Since a majority of patients will require more than one antihypertensive agent, appropriate drug selection should be based on presence of compelling indications, individual patient response, and cost.



Reference

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