Guidance Is Sparse for Nonmotor PD Symptoms

BY KATE JOHNSON

occurrence, which is the impetus behind new treatment guidelines from the American Academy of Neurology.

"Nonmotor symptoms are an integral part of this syndrome. These symptoms can be as troublesome as motor symptoms and impact activities of daily living, though they are often underrecognized by health care professionals," wrote Dr. Theresa A. Zesiewicz, lead author of the guidelines and professor of neurology at the University of South Florida, Tampa (Neurology 2010;74:924-31).

Treatment of depression, dementia, and psychosis in Parkinson's disease (PD) has been addressed in a previous guideline (Neurology 2006;66:996-1002), as has treatment of PD-related sialorrhea with botulinum toxin (Neurology 2008;70:1707-14).

However, there are many other nonmotor symptoms for which there is a paucity of research concerning treatment, wrote Dr. Zesiewicz and her colleagues wrote.

"The disease process of PD certainly contributes to many nonmotor symptoms, including autonomic dysfunction (orthostatic hypotension, gastrointestinal symptoms), depression, sexual dysfunction, and sleep dysfunction," said Dr. Zesiewicz in an interview. "However, medications used to treat PD can contribute to other nonmotor symptoms. For example, the use of some PD medications can contribute to excessive daytime sleepiness, while others can cause insomnia."

In general, the treatment of most non-motor PD symptoms should mirror treatments given to non-PD patients, because "research is not currently available to support or refute their use specifically in PD patients," she said. The new guidelines provide evidence-based recommendations for the treatment of only four conditions: erectile dysfunction, constipation, restless legs syndrome, and fatigue.

A wide range of nonmotor symptoms were reviewed for the guidelines, including autonomic dysfunction such as gastrointestinal disorders, orthostatic hypotension, sexual dysfunction, and urinary incontinence; sleep disorders, such as restless legs syndrome, periodic limb movements of sleep, excessive daytime somnolence, insomnia, REM sleep behavior disorder; fatigue; and anxiety.

After a literature search to capture articles on these symptoms published in 1966-2008, a panel review deemed 46 papers relevant for the development of evidence-based recommendations, concluding that there was insufficient evidence to make recommendations on the treatment of urinary incontinence, orthostatic hypotension, insomnia, REM sleep behavior disorder, and anxiety.

For the treatment of erectile dysfunction in PD, the authors recommend that

sildenafil citrate (50 mg) "is possibly efficacious." Sexual dysfunction is common in both men and women with PD, they wrote. "Dysautonomia manifests as erectile dysfunction (ED) but also as reduced genital sensitivity and lubrication and difficulties reaching orgasm." Only one controlled clinical trial for the treatment of ED was available for review, however.

For constipation, they concluded that

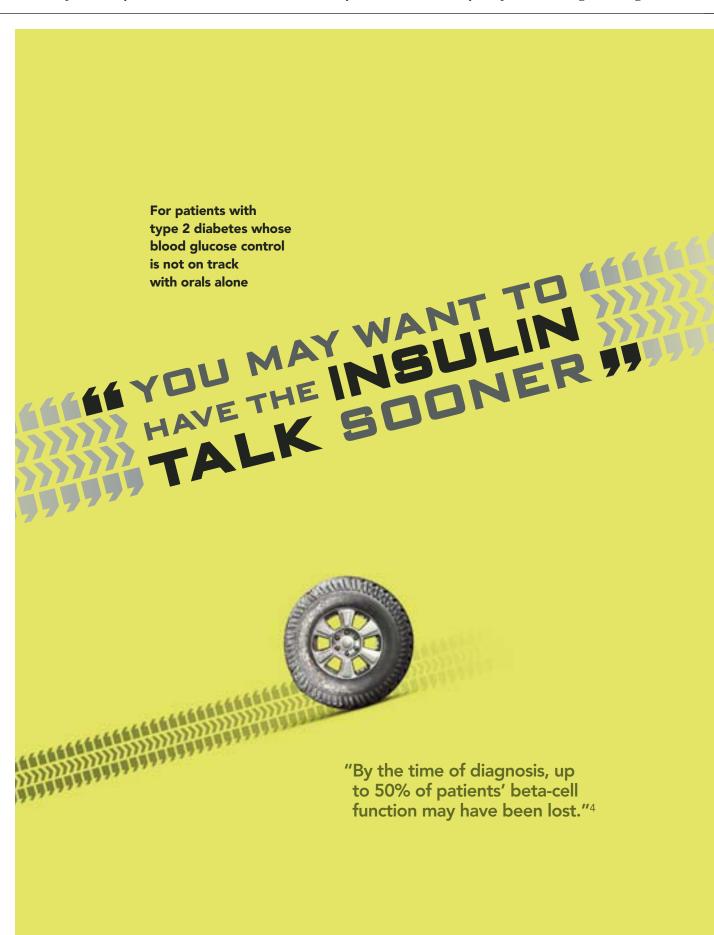
isosmotic macrogol (polyethylene glycol) "possibly improves constipation in PD." Four studies evaluating the efficacy of pharmacologic agents for PD-related constipation were reviewed, and the recommendation is based on one class II study.

Regarding PD-related sleep dysfunction, the authors found sufficient evidence to make treatment recommendations for excessive daytime somnolence

(EDS), and restless leg syndrome or periodic limb movements of sleep.

Based on the results of two class I studies, they recommend modafinil to improve patients' perceptions of wakefulness, although "it is ineffective in objectively improving EDS as measured by objective tests," they added.

In addition, they said, levodopa/carbidopa "probably decreases the frequency of spontaneous nighttime leg move-



ments," based on one class I study and should therefore be considered to treat periodic limb movements of sleep in Parkinson's disease.

And finally, "methylphenidate is possibly useful in treating fatigue in PD," they concluded, based on one class II study.

However, there is potential for abuse, they warn. "Although there is no current evidence to suggest such a risk in PD, patients with PD do have a risk for dopamine dysregulation syndrome and impulse control disorders that share many clinical and functional imaging

features with addiction," they cau-

"The same rules for treating PD patients with these medications would apply as when treating any patients, including careful monitoring of drug interactions and taking comorbid conditions into consideration," Dr. Zesiewicz noted.

"Of course, it is important to recognize that the treatments recommended are not the only available treatments," commented Dr. Ronald B. Postuma, a PD researcher and assistant professor of neurology at the Montreal General

Hospital. "The guidelines focus only on therapies that have good randomized controlled trial evidence. All experienced clinicians will recognize several useful treatments that are not in the recommendations because of incomplete evidence," he said in an interview.

Disclosures: Dr. Zesiewicz reported receiving funding for travel and for serving on speakers bureaus from Boehringer Ingelheim and Teva Pharmaceutical Industries Ltd. She also reported receiving research support from various pharmaceutical companies.

THE "INSULIN TALK"

Have the talk early and as needed, to help destigmatize insulin²

- Reassure patients that using insulin doesn't mean failure and that insulin may help replace what the body is no longer adequately making
- Turn the negative mindset of failure into a positive opportunity to take personal control of A1C

Put insulin therapy in context

- Explain the benefits of maintaining blood glucose goals and the risks associated with insulin therapy
- Talk about how insulin may be worth the effort insulin is an effective treatment option that works as part of an overall treatment plan to lower blood glucose

Identify patients' personal obstacles and help defuse the "scary" factor²

- Today's insulin injections generally cause little discomfort and are administered using small, thin needles^{2,6}
- Insulin pens make insulin more convenient to administer and are discreet²
- Insulin dose may need to be adjusted up or down over the course of treatment depending on how a patient's body responds⁵

INSULIN

IMPROVING BLOOD GLUCOSE CONTROL SHOULDN'T WAIT

It's never too early to have the "insulin talk"

Some conversations may be hard to initiate. Take the "insulin talk," for example. According to the American Diabetes Association, insulin is the most effective agent for lowering blood glucose.¹ It works as part of an overall diabetes treatment plan, which may include diet, exercise, and other diabetes medication. Having the "insulin talk" early may help patients accept insulin as a potential treatment option to help them achieve their A1C goals.²

The results of having a positive "insulin talk" can be impactful: in a survey, about 80% of patients with type 2 diabetes on OADs said they'd consider taking insulin if their doctor recommended it.³ So by starting the dialogue now, you can help your patients have a better understanding of insulin as an effective treatment option for lowering blood glucose.

Insulin—a chance for successful glycemic control, not a punishment for failure

Patients may focus on blaming themselves for their uncontrolled blood glucose, but you can help them focus on turning this negative mindset into positive action for managing their disease.² The United Kingdom Prospective Diabetes Study showed that by the time patients with type 2 diabetes are diagnosed, they may already have lost up to 50% of their beta-cell function, and this function may continue to decline.⁴

Because the disease is progressive, many patients with type 2 diabetes may eventually need insulin to achieve or maintain glycemic control.^{2,5} But by the time patients with type 2 diabetes are prescribed insulin, they may have had diabetes for 10 to 15 years and may already have complications due to a prolonged period of uncontrolled blood glucose.⁶ Starting insulin earlier in the disease continuum for appropriate patients can help improve glycemic control. Controlling blood glucose can reduce the risk of diabetes-related complications.^{5,6}

Treatment plans and glycemic targets should be individualized for each patient.

Insulin is indicated to help improve glycemic control in patients with diabetes mellitus.

Important Safety Information About Insulin

Possible side effects may include blood glucose levels that are too low, injection site reactions, and allergic reactions, including itching and rash. Other medications and supplements could change the way insulin works. Glucose monitoring is recommended for patients with diabetes.

Learn more at www.RethinkInsulin.com

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Test Identifies Tumors in Kids' Vertigo

BY HEIDI SPLETE

ORLANDO — Balance testing can help identify tumors in children presenting with vertigo, according to a review of 71 children younger than 18 years.

Currently, there isn't a consistent correlation between balance testing and the etiology of vertigo within a pediatric population, said Dr. Anali Dadgostar of the University of British Columbia, Vancouver.

Dr. Dadgostar and her colleagues reviewed all patients younger than age 17

Major Finding: Balance testing helped to identify brain stem tumors in three children who presented with vertice.

mors in three children who presented with vertigo. **Data Source:** A prospective study

of 71 children.

Disclosures: Dr. Dadgostar had no financial conflicts to disclose.

years who were referred to a single hospital between 1999 and 2006 for assessment of vertigo.

Data from 110 patients were reviewed, and 71 underwent balance tests, such as posturography, which included uphill and downhill motion; and caloric testing, which stimulated the inner ear and nearby nerves using water of different temperatures.

In all, 15 patients had abnormal findings based on the balance assessment. These patients ranged in age from 7 to 16 years, with an average age of 12 years, according to the findings, which were presented at the Triological Society's Combined Sections Meeting.

"The most worrisome finding within the balance testing was the cerebellar sign," Dr. Dadgostar said.

Four of the patients with abnormal findings had cerebellar signs, and three of these patients were ultimately diagnosed with brain stem tumors.

In addition, just over half (53%) of the patients with abnormal findings had caloric reductions that suggested Meniere's disease.

Children with vertigo often are referred to clinicians who don't have the professional training to get a correct evaluation, Dr. Dadgostar noted at the meeting, which was jointly sponsored by the Triological Society and the American College of Surgeons.

These results suggest that balance testing in children with vertigo can be a useful diagnostic adjunct that might spare some children the need for more invasive diagnostic procedures, Dr. Dadgostar said.

The study was limited by potential selection biases.

Additional research is needed to compare balance testing directly with other methods for assessing children with vertigo, she added.