

Hyperparathyroid-Related Cognitive Dysfunction Improves With Surgery

BY BRUCE JANCIN
Denver Bureau

PHOENIX — Mild neurocognitive dysfunction is common in patients with primary hyperparathyroidism—and surgery provides durable improvement, according to the preliminary results of an ongoing prospective trial.

“If anything, the improvement appears to increase over time. As a result, we believe that neurocognitive symptoms should be evaluated in all patients with primary hyperparathyroidism. Depression or cognitive dysfunction should therefore be considered as criteria for referral for parathyroidectomy in patients with primary hyperparathyroidism. Current practice guidelines could be amended to incorporate these criteria,” Dr. Julie Ann Sosa said in her Joel J. Roslyn Faculty Research Award lecture at a congress sponsored by the Association for Academic Surgery and the Society of University Surgeons.

Primary hyperparathyroidism (PHPT) is a disorder of hormone hypersecretion af-

fecting mostly women in their 50s and 60s. It results in serum hypercalcemia, which, in its more severe forms, can result in confusion, psychosis, coma, and death.

Baseline levels of intact parathyroid hormone and

serum calcium weren't predictive of postsurgical rates of improvement in learning efficiency or total errors.

Dr. Sosa's ongoing study is largely sponsored by grants from the Association for Academic Surgery, the American Geriatrics Society, and private foundations.

Parathyroidectomy Boosts Neurocognitive Function on Groton Maze Learning Test

	Learning efficiency (correct moves per second)	Total errors (on five trials)
Preop	0.50	79.0
1 month postop	0.61	62.5
3 months postop	0.67	59.6
6 months postop	0.69	53.2

Note: Based on a study of 140 patients with PHPT.
Source: Dr. Sosa

ELSEVIER GLOBAL MEDICAL NEWS



‘Neurocognitive symptoms should be evaluated in all patients with primary hyperparathyroidism.’


DR. SOSA

However, PHPT often initially remains asymptomatic or only mildly symptomatic for years. Widespread controversy has surrounded the role of parathyroidectomy when the disorder is detected at this stage via automated blood screening, said Dr. Sosa, a surgeon at Yale University, New Haven, Conn.

Dr. Sosa reported on 140 consecutive patients with PHPT referred to the Yale department of surgery. The control group comprised 89 patients referred for thyroidectomy for benign euthyroid disease. The groups were similar in age and comorbidities on the validated Cumulative Illness Rating Scale.

The primary outcome measure was change in neurocognitive status as reflected in scoring on the Groton Maze Learning Test. The test is a validated measure of short-term visual/spatial memory sensitive to subclinical perseverative errors and information-processing speed. It provides two summary measures: learning efficiency, which correlates with neurocognitive measures of working memory, attention, and information-processing speed; and total errors, which correlates with the neurocognitive functions of planning and spatial memory.

Preoperatively, the PHPT group scored significantly worse than controls did on both measures. Postparathyroidectomy, however, the PHPT patients showed high-



FOR THE EFFICACY YOUR PATIENTS WITH CONGESTION EXPECT...

Mucinex^D


IS AVAILABLE BEHIND THE PHARMACY COUNTER

The MUCINEX D formula has not changed

- MUCINEX D clears nasal congestion & relieves sinus pressure due to colds or allergies¹
- Pseudoephedrine HCl shrinks swollen nasal mucosa, keeping nasal passages open²
- The bi-layer tablet, with immediate- and extended-release guaifenesin, thins and loosens mucus for 12 hours³


Encourage your patients to get the nasal congestion relief they expect by asking their pharmacist for **MUCINEX D**¹

Find additional information at www.adamsrt.com.



Use as directed.

References: 1. Mucinex D product labeling. 2. Hamilton LH, Chobanian SL, Cato A, Perkins JG. A study of sustained action pseudoephedrine in allergic rhinitis. *Ann Allergy*. 1982;48:87-92. 3. Data on file [Mucinex NDA], Adams Respiratory Therapeutics, Chester, NJ.



© 2006 Adams Respiratory Therapeutics, Fort Worth, TX 76155
192 REV. 122106

Mucinex^D

600 mg guaifenesin and 60 mg pseudoephedrine HCl
extended-release bi-layer tablets

