## Euthyroid Function Can Steer Metabolic Syndrome

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People with low normal thyroid function are at elevated risk for components of the metabolic syndrome, according to the first large, community-based study of this population.

Previous research showed an association between overt hypothyroidism and atherosclerotic cardiovascular disease (J. Clin. Endocrinol. Metab. 2003;88:2438-44; N. Engl. J. Med. 2001;344:501-9). However, the current study indicates that thyroid function can influence lipid metabolism even in the euthyroid range, said Dr. Annemieke Roos, of the department of endocrinology at the University Medical Center Groningen (the Netherlands), and her associates.

They assessed 1,581 euthyroid participants from the Prevention of Renal and Vascular End Stage Disease (PREVEND) study (J. Am. Soc. Nephrol. 2000;11:1882-8). People were considered euthyroid if

they were within the reference range for thyroid-stimulating hormone (0.35-4.94 mIU/L) and free  $T_4$  (9.14-23.81 pmol/L) without taking thyroid medication.

A total of 19% of men and 15% of women met the National Cholesterol Education Program's Adult Treatment Panel (ATP) III criteria for metabolic syndrome. After adjustment for age and gender, free  $T_4$  (FT<sub>4</sub>) was significantly related to four out of five ATP III criteria: abdominal obesity; glucose intolerance/insulin resistance;

atherogenic dyslipidemia; and a proinflammatory/prothrombic state. Association with hypertension, was not significant (J. Clin. Endocrinol. Metab. 2007;92:491-6).

After adjustment for insulin resistance,  $FT_4$  associations with waist circumference, triglycerides, and HDL cholesterol became weaker but remained significant. The finding suggests "mechanisms other than those associated with insulin resistance underlie the relation of  $FT_4$  with these components of the metabolic syndrome."

# DETROL LA is the #1 prescribed brand for OAB\*—with BIG REDUCTIONS in OAB symptoms<sup>1,2</sup>

### REDUCE SEVERE URGENCY INCONTINENCE (UI) EPISODES

#### TOTAL PATIENT POPULATION1

≥5 urgency incontinence episodes/week

Median % reduction from baseline per week P=.0001

Placebo

33%
(n=507)

DETROL LA
4 mg qd

71%
(n=507)

### SEVERE UI POPULATION<sup>2</sup>

21 to 168 urgency incontinence episodes/week P=.022

Placebo 30% (n=210)

DETROL LA 4 mg qd 68% (n=171)

Van Kerrebroeck et al. *Urology*. 2001;57:414-421.¹ Landis et al. *J Urol*. 2004;171:752-756.² A post hoc subgroup analysis of the Van Kerrebroeck study. See full study description on next page. See full study description on next page.

DETROLLA is indicated for the treatment of overactive bladder with symptoms of urge incontinence, urgency, and frequency. DETROL LA is contraindicated in patients with urinary retention, gastric retention, or uncontrolled narrow-angle glaucoma and in patients who have demonstrated hypersensitivity to the drug or its ingredients. DETROL LA capsules should be used with caution in patients with clinically significant bladder outflow obstruction, gastrointestinal obstructive disorders, controlled narrow-angle glaucoma, and significantly reduced hepatic or renal function. Dry mouth was the most frequently reported adverse event (DETROL LA 23% vs placebo 8%); others (≥4%) included headache (DETROL LA 6% vs placebo 4%), constipation (DETROL LA 6% vs placebo 4%), and abdominal pain (DETROL LA 4% vs placebo 2%).

\*Source: IMS Health, NPA data, based on total US prescriptions of antimuscarinies for OAB from October 2001 to November 2006.

\*Source: IMS Midas Global Sales Audit, Verispan longitudinal data, based on total prescriptions of DETROL and DETROL LA for OAB from April 1998 to October 2006.



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