## RHEUMATOLOGY

What role, if any, does testosterone have in the treatment of osteoporosis in women and men?

Ouestion submitted by: **Dr. Steve Coyle, MD, LMCC** Family practitioner Winnipeg, Manitoba The 2002 Clinical Practice Guidelines for the Diagnosis and Management of Osteoporosis in Canada¹ do not mention the use of testosterone as a therapeutic option.

For women, anabolic steroids were considered as a possible backup treatment for osteoporosis before the advent of better therapies, such as bisphosphonates and selective estrogen receptor modulators. However, steroids were never popular due to virilizing side-effects, and have since been discarded as therapeutic alternatives. Thus, testosterone has no role in treating osteoporosis in women.

In men, hypogonadism is recognized as a secondary cause of osteoporosis. Some small studies have shown improvement in bone turnover markers and increases in bone mineral density (BMD) when men with low testosterone levels are treated with testosterone supplementation. However, no studies have shown a reduction in fracture incidence with testosterone. Fracture reduction is the gold standard for therapeutic efficacy in osteoporosis. In men with normal serum testosterone levels and osteoporosis, studies conflict, but most would agree that testosterone use is not warranted. In contrast, the bisphosphonate, alendronate, has been shown to increase BMD and reduce vertebral fractures in men with osteoporosis.

Small studies have shown an additive effect on BMD when testosterone and alendronate are used in combination in hypogonadal men with osteoporosis, but again, there is no fracture data for this combination.

## Reference

 Published by the Scientific Advisory Council of the Osteoporosis Society of Canada in the Canadian Medical Association Journal (November 2002).

Answered by: Philip A. Baer MDCM, FRCPC, FACR Rheumatologist, Malvern Medical Arts Centre Toronto, Ontario

## **CARDIOLOGY**

Should microalbuminuria be done on all hypertensive patients when deciding whether to prescribe an ACE inhibitor or an ARB versus other antihypertensive agents?

Question submitted by: Francois Theoret, MD, CCFP Family physician Hawkesbury, Ontario The simple answer is no.

Although microalbuminuria is a strong indicator of cardiovascular risk, it is only in patients with diabetes or established renal disease that specific therapy with reninangiotensin system (RAS) antagonists have been demonstrated to show benefit above and beyond other types of antihypertensive drugs.

There is no evidence to date to suggest that screening for microalbuminuria in patients other than those with diabetes or pre-existing renal disease will definitively identify patients who will respond to RAS blockers better than other agents.

The Canadian Hypertension Society guidelines for 2003 do not recommend assessing for microalbuminuria unless the patient has diabetes or renal disease, and the American Joint National Committee 7 guidelines only suggest it as an optional investigative tool.

Therefore, microalbuminuria should only be done routinely in patients with hypertension who have diabetes or pre-existing renal disease.

Answered by: Bruce Josephson, MD, FRCPC Associate professor, department of medicine Division of cardiology Dalhousie University Halifax, Nova Scotia

## **UROLOGY**



Ouestion submitted by: **Dr. Denis Cheung, MD, CCFP** Family practitioner Nepean, Ontario Benign prostatic hypertrophy (BPH) is very common in the aging male. The main symptoms include obstructive symptoms (*e.g.*, weak urinary stream, intermittent urine stream, straining to void, hesitancy, feeling of incomplete voiding), and irritative symptoms (*e.g.*, frequency, urgency, nocturia).

Symptoms can be objectively quantified using the International Prostate Symptoms Score. Mild symptoms don't necessarily require therapy unless the patient is significantly bothered. Moderate to severe urinary symptoms are treated with uroselective alpha blockers, the mainstay of treatment. Non-selective alpha blockers require dose titration, can take a few weeks to start working, and can have adverse effects (such as postural hypertension). Finasteride, in combination with alpha blockers, may provide more benefit to men with larger prostates.

Indications for transurethral reduction of prostate include recurrent bladder infection, bladder stones, recurrent hematuria secondary BPH, urine retention, renal insufficiency secondary BPH, and failure of medical therapy.

Answered by: Dr. Nick F. Logarakis, MD, FRCSC Urologic surgeon The Scarborough Hospital Scarborough, Ontario