

To Treat or Not to Treat? Androgen Decline in the Aging Male

1. Does testosterone decline cause disease?

Reduction in testosterone below the normal young male range results in multiple problems, including:

- Reduced sexual function
- Reduced muscle mass and strength
- Increased fat mass
- Decreased bone density
- Fatigue
- Negative mood
- Reduced hemocrit and hemoglobin

These features can be reversed with testosterone replacement.

2. Once low testosterone is confirmed, what is the next step in diagnosis?

It is necessary to obtain a serum LH to distinguish gonadal failure (high LH) from pituitary disease (normal or low LH). A normal serum prolactin usually rules out hypothalamic-pituitary disease, such as tumours.

As presented at the University of Alberta's **Medical Grand Rounds** by **Donald Morrish, MD, PhD, FRCPC**

3. What therapy is available?

In Canada, there are various recommendable testosterone preparations available, including testosterone undecanoate (oral), testosterone cypionate (IM), and testosterone enanthate (IM), as well as testosterone gel and patches. Methylated oral formulations should not be used due to potential liver toxicity. Intramuscular preparations should be considered as a secondary, less physiologic choice.

4. Does treatment in older males have long-term efficacy and safety?

Currently, therapy of true hypogonadism has short-term benefits. There are no data on long-term safety in the older population.

For an in-depth look at androgen decline, please go to page 65.

On the Table: Food Allergies

1. What is the difference between IgE- and non-IgE-mediated food reactions?

- IgE-mediated reactions are immediate hypersensitivity reactions. They range from mild manifestations to life-threatening anaphylaxis.
- Non-IgE-mediated reactions tend to be delayed, require higher levels of exposure, and typically do not progress on to life-threatening manifestations.

2. Which foods have been assigned as priority allergens in Canada?

- Cow's milk
- Hen's egg
- Soy
- Wheat
- Peanut
- Tree nut
- Fish and shellfish

Scheduled for presentation at the University of Toronto's **Primary Care Today** conference by **Peter Vadas**, MD, PhD, FRCPC, FACP (postponed)

3. How effective are prick skin tests in diagnosing food allergies?

Neither prick skin tests, nor in vitro tests alone will establish a diagnosis of food allergy. A positive skin test or blood test must be interpreted in the context of clinical reactions, as false positive tests are frequent.

4. What are some problems associated with dietary elimination?

- Food allergens hidden in packaged or prepared foods in the absence of adequate labelling.
- Absence of easily recognizable terminology on labels.

For an in-depth look at food allergies, please go to page 86.

What's The Buzz?

The Latest on Hormone Replacement Therapy

1. What are the limitations of the WHI?

- The study did not quantify quality-of-life variables, such as the control of menopausal symptoms.
- It is not clear about the use of HRT in younger women.
- Only one type of regimen, the combination of conjugated estrogen (0.625 mg/day) plus medroxyprogesterone (2.5 mg/day), was investigated. However, most women in Europe who use HRT do not take the preparation studied in the WHI.
- It gives no indication of the effects of other doses, formulations, and routes of administration.

2. What is the main goal of HRT?

HRT should be used for the relief of menopausal symptoms, such as sleep disturbance, anxiety, hot flashes, and irritability. Women using HRT should be closely monitored with regular visits. In fact, a baseline mammogram, followed by yearly mammograms, is recommended. The ultimate goal of HRT is to deal with the transitional symptoms of menopause, then to taper the dosage, if possible, and, finally, to discontinue therapy altogether. If symptoms persist, some consideration should be given to alternative therapies.

As presented at the University of Toronto's **Primary Care Day** conference by **Victoria J. Davis, MD, FRCSC**

3. When is HRT contraindicated?

The main point brought out in the most recent HRT studies is that combined HRT can be used for the short-term relief of menopausal symptoms, but not for the long-term prevention of disease. Therefore, HRT should not be prescribed for the prevention of:

- cardiovascular disease,
- dementia,
- stroke, or
- osteopenia.

4. What are some of the attributable risks for combined, continuous HRT?

- Coronary heart disease
- Stroke
- Venous thromboembolism
- Cancer (breast)

For an in-depth look at recent HRT studies, please go to page 74.

Making the Right Call With Community-Acquired Pneumonia

1. Is a chest radiograph necessary to substantiate a diagnosis of pneumonia?

Yes. A clinical diagnosis of pneumonia is inaccurate and must be substantiated by a chest radiograph. However, the chest radiograph may be negative and the patient could still have pneumonia. If your clinical suspicion of pneumonia is high and the radiograph is negative, repeat it in 48 hours or perform a CT scan of the chest (if you have the local resources to do this).

2. What is the most common cause of CAP?

Streptococcus pneumoniae accounts for 60% of all cases of bacteremic pneumonia and about 50% of all cases of pneumonia requiring admission to hospital. It probably accounts for fewer cases of pneumonia treated on an ambulatory basis.

Based on an article by **Thomas J. Marrie, MD**

3. How often are blood cultures positive in patients who are admitted to hospital with CAP?

The exact rate varies somewhat with patients (e.g., the rate of bacteremic pneumococcal pneumonia is higher in patients with HIV infection). In general, 6% to 8% of patients with CAP have positive blood cultures.

4. Should patients with pneumonia have their urine tested for Legionella?

The Legionella urinary antigen test is expensive (approximately \$40 per test) and only *L. pneumophila* serogroup 1 is reliably detected. It is best to reserve the test for patients who have severe pneumonia with negative blood and sputum cultures.

For an in-depth look at pneumonia, please go to page 96.