

high, supporting the current US practice of not performing a biopsy on the contralateral testis.

Fosså and colleagues evaluated the risk of developing a METACHRONOUS contralateral tumor in 29,515 testicular cancer patients reported to the National Cancer Institute's Surveillance, Epidemiology and End Results Program between 1973 and 2001. They found that men with unilateral testicular cancer had a 12.4-fold increased risk of developing a contralateral tumor, compared to the general population. This risk decreased with time from diagnosis of the first tumor, indicating that the increase is not due to radiotherapy. Men with seminoma and those aged under 30 had a significantly higher risk than those with non-seminoma tumors and those aged over 30. The 10-year overall survival rate was 93% for patients with metachronous and 85% for patients with SYNCHRONOUS contralateral testicular cancer. Interestingly, development of a metachronous contralateral tumor did not decrease overall survival.

The authors point to indirect evidence that cisplatin-based chemotherapy might reduce the risk of developing a contralateral tumor, and call for further studies; meanwhile, they reiterate that all men should perform regular self-examination. Testicular ultrasonography or, sometimes, biopsy might be warranted for men at higher risk of developing contralateral tumors, as early detection might allow testis-sparing surgery.

Tamsin Osborne

Original article Fosså SD *et al.* (2005) Risk of contralateral testicular cancer: a population-based study of 29,515 US men. *J Natl Cancer Inst* 97: 1056–1066

Vardenafil compared with papaverine in penile Doppler ultrasonography

Penile color Doppler ultrasound is currently considered the 'gold standard' for the evaluation of erectile dysfunction; however, the technique requires intracavernous injection of vasoactive drugs, such as papaverine, which are associated with adverse effects including prolonged erection and priapism. Anxiety and pain associated with the injection can also interfere with the sensitivity and specificity of the test. This study aimed to determine whether the oral phosphodiesterase type 5 inhibitor

vardenafil, which has few adverse effects, could be used instead of papaverine.

This study enrolled 24 men with erectile dysfunction aged between 28 and 62 years. Penile color Doppler ultrasound evaluation of cavernous arterial flow parameters was performed before and after administration of either papaverine or vardenafil, with genital and audio-visual sexual stimulation, at two separate sessions at least 5 days apart. Peak flow velocity had increased significantly by 30 min after oral vardenafil had been taken, reaching a maximum value by 60 min. There was no significant difference in mean peak flow velocity between papaverine injection after 1, 5, 10 and 20 min, compared with oral vardenafil after 30, 45, 60, 75 and 90 min. Whereas 12.5% of patients who received papaverine suffered from prolonged erection requiring pharmacologic intervention, no such effects were seen with vardenafil. Around 83% of patients reported injection-related pain, and around 21% reported this to be severe. The most common side effect reported for vardenafil was headache (12.5%).

The authors conclude that penile color Doppler ultrasound with oral vardenafil has promise as a potential noninvasive technique for evaluating erectile dysfunction.

Carol Lovegrove

Original article Ardicoglu A *et al.* (2005) Effectiveness of vardenafil versus papaverine in penile Doppler ultrasonography. *Urol Int* 75: 75–79

Randomized controlled trial suggests healthy living could slow progression of prostate cancer

Questions over the wisdom of aggressive treatment for early prostate cancer have led to growing interest in the benefits of diet and exercise; however, randomized, controlled trials are lacking. Ornish and colleagues have examined the effects of intensive lifestyle changes on the progression of early prostate cancer by measuring serum prostate-specific antigen (PSA), serum-stimulated growth of LNCaP prostate cancer cells, and treatment trends.

They enrolled 93 men with biopsy-proven prostate cancer of Gleason score <7 and serum PSA of 4–10 ng/ml, none of whom had undergone conventional treatment for

GLOSSARY

METACHRONOUS

Originating on separate occasions

SYNCHRONOUS

Originating simultaneously

LNCaP

A human prostate cancer cell line used to study the mechanisms and benefits of therapeutic interventions