Detection of recurrent disease in prostate cancer

2- ^{18}F fluoro-2-deoxyglucose positron emission tomography (FDG-PET) is useful in the detection of a variety of solid tumors, but the value of this imaging technique in prostate cancer is unproven. Image artefacts in the lower pelvis—caused by accumulation of excreted FDG tracer in the bladder—have been a significant problem in this setting. The recent development of newer, iterative image-reconstruction techniques, however, has allowed improved interpretation of FDG-PET images. In their recent study, Schöder and colleagues investigated the use of FDG-PET plus optimal image reconstruction in patients with biochemical recurrence following prostatectomy for prostate cancer.

This retrospective analysis included 91 patients, all of whom had undergone radical retropubic prostatectomy and had subsequently suffered prostate-specific antigen relapse (prostate-specific antigen >0.1 ng/ml in three consecutive measurements at least 2 weeks apart). Local and/or metastatic lesions were shown by FDG-PET in 31 of the patients. Comparison with bone scan, MRI and CT results showed three of the cases to probably be false positives; in addition, two further cases that were missed by FDG-PET, one of local recurrence and one of metastatic disease, were identified by other imaging devices. The remainder of the false-negative results by FDG-PET, however, were also negative using other imaging techniques.

The study showed that the probability of detecting recurrent disease by FDG-PET increased with rising PSA levels. Noting this fact, Schöder *et al.* suggest that this method might be appropriate only in those with PSA levels of over 2.4 ng/ml or a PSA doubling time of above 1.3 ng/ml/year.

Ruth Kirby

Original article Schöder H *et al.* (2005) 2- ^{18}F Fluoro-2-deoxyglucose positron emission tomography for the detection of disease in patients with prostate-specific antigen relapse after radical prostatectomy. *Clin Cancer Res* 11: 4761–4769

Herbal treatments for erectile dysfunction are contaminated with sildenafil and tadalafil

Fleshner *et al.* have shown evidence that a significant proportion of natural and herbal

products marketed for the treatment of erectile dysfunction contain phosphodiesterase type 5 (PDE5) inhibitors such as sildenafil and tadalafil.

The authors purchased seven brands of natural products via the internet and from a local health store, which were marketed for the treatment of erectile dysfunction. Products were chosen that claimed efficacy before sexual activity, and stated that they did not need to be taken on a regular basis. Only oral tablets or capsules were used in this study. Twelve tablets were taken from each of the seven products and tested for contamination with PDE5 inhibitors in a blinded analysis using high-performance liquid chromatography and mass spectrometry.

Of the seven products analyzed, two were contaminated with PDE5 inhibitors. One product contained a mean dose of 30.2 mg sildenafil per tablet and the second contained a mean dose of 19.7 mg tadalafil per tablet. No evidence of vardenafil was detected in any of the samples tested.

The authors emphasize the potentially fatal interactions that PDE5 inhibitors can have with commonly used drugs—for example, nitrates—which may cause effects such as hypotension, shock and even death. Furthermore, these products were marketed as safe and causing no adverse side effects. The authors highlight the need for stricter regulation of the natural health products industry.

Marie Lofthouse

Original article Fleshner N *et al.* (2005) Evidence for contamination of herbal erectile dysfunction products with phosphodiesterase type 5 inhibitors. *J Urol* 174: 636–641

Neoadjuvant androgen deprivation delays curative radiotherapy

Short-term androgen deprivation confers no benefit in high-risk prostate cancer patients treated with high-dose radiotherapy, according to Martinez and colleagues.

The authors, from three institutes in the US and Germany, looked at long-term outcomes in 934 patients receiving 5 weeks of accelerated, hypofractionated, external-beam radiotherapy (EBRT) and transrectal ultrasound (TRUS)-guided, conformally modulated,