

### The natural progression of conservatively treated clinically localized prostate cancer

Aggressive treatment is not appropriate for most men with low-grade prostate cancer, according to a recent study published in *JAMA*. Albertsen and co-workers have studied the natural progression of conservatively treated clinically localized prostate cancer, and found that the annual mortality rate from prostate cancer remained stable after 15 years following diagnosis.

This retrospective, population-based cohort study—the largest of its kind to date—builds on the same authors' competing-risk analysis published in 1998. Here, they extend their follow-up to 20 years.

The study included 767 men, aged 55 to 74 years, who were diagnosed with clinically localized prostate cancer and treated either with observation (median 24 years), or with androgen withdrawal therapy. The team made use of data collected over 20 years by the Connecticut Tumor Registry, and looked at the probability of death caused by prostate cancer or other competing conditions, taking into account the patient's age at diagnosis and tumor grade.

The results showed that patients with low-grade prostate cancer are unlikely to die from their illness within 20 years (6 deaths per 1000 person/years), whereas those with high-grade prostate cancer are likely to die within 10 years if treated conservatively (121 deaths per 1000 person/years). The authors noted that counselling patients with moderately differentiated disease will pose the greatest challenge, since these patients have an intermediate risk of dying from prostate cancer if they do not receive aggressive treatment.

**Original article** Albertsen PC *et al.* (2005) 20-year outcomes following conservative management of clinically localized prostate cancer. *JAMA* **293:** 2095–2101

### Biofeedback physical therapy for chronic pelvic pain syndrome

It has recently been suggested that (non-bacterial) chronic prostatitis (CP) or chronic pelvic pain syndrome (CPPS) may be

associated with pelvic-floor muscle dysfunction. Cornel *et al.* therefore investigated the effect of pelvic-floor biofeedback physical therapy on men with symptoms of CPPS.

In this study, 33 men diagnosed with CP/CPPS took part in a biofeedback re-education program. The therapy consisted of six to eight sessions and included paramedical anamnesis, inspection of position, mobility and breathing technique. Patients were also taught how to relax and constrict their pelvic-floor muscles. Biofeedback measurements were performed using a one-channel electromyography biofeedback apparatus (Pelvined 932, Enraf-Nonius, The Netherlands). The National Institutes of Health-Chronic Prostatitis Symptom Index questionnaire was used to monitor the effects of therapy.

In total, 31 patients underwent the full treatment program. The results showed that mean total Chronic Prostatitis Symptom Index score decreased after treatment in 30 patients. Improvement was seen in all sub-domains of the questionnaire, including pain, quality of life and micturition. Post-treatment electromyography values showed that the mean pelvic-floor muscle tonus decreased significantly.

The authors conclude that there is a significant positive effect of pelvic-floor biofeedback physical therapy for men with CP/CPPS, suggesting that the pelvic floor plays an important role in the pathophysiology of CP/CPPS. The authors note that the long-term durability of these outcomes has not yet been investigated.

**Original article** Cornel EB *et al.* (2005) The effect of biofeedback physical therapy in men with chronic pelvic pain syndrome type III. *Eur Urol* **47:** 607–611

### Inhibition of HER2 tyrosine kinase disrupts androgen-receptor functioning

The androgen receptor has been implicated in the recurrence and progression of prostate cancer after androgen-deprivation therapy. A new study by Liu *et al.* suggests that HER2 tyrosine kinase, a member of the epidermal growth factor receptor family, may be responsible for reactivation of the androgen receptor despite low levels of circulating hormones.