

## **ULTRASOUND GUIDED INTRAPROSTATIC INFILTRATION FOR CHRONIC PROSTATITIS - A MULTI-CENTRE STUDY**

### **Aims**

Although many therapeutic options are available for chronic prostatitis, none is completely efficacious. Systemic antibiotic therapy is useful, particularly in bacterial forms and most urologists agree prolonged antibiotic treatment is beneficial even in the so-called "abacterial" forms of the disease. However the failure rate is high probably because of an associated local autoimmune disease process (with release of large quantities of TNF alfa), and the presence of so-called intraprostatic bacterial microfilms which the drugs cannot penetrate. Given this background we re-tested ultrasound guided intra-prostate infiltration of a cocktail of antibiotics and betametazone, which is a therapeutical option we previously assessed in 1989.

### **Methods**

150 patients, referred to us between 1999 and 2001 because of symptoms indicative of chronic prostatitis, were enrolled in this study. All patients gave written, informed consent to the trial which included 1) a clinical urological examination with DRE; 2) TRUS with micturitional dynamics and uroflowmetry; 3) routine cultures tests and DNA amplification with PCR technique of Chlamidia T, Mycoplasmi, Gonorrhoea and HPV. All tests were done on urethral swab, sperm and urine samples. During the first consultation patients completed the NIH Prostatitis Symptoms Score (NIHPSS) and Prostatitis Symptoms Index (PSI) questionnaires. Patients were divided into three groups on the basis of laboratory results and each group received an antibiotic cocktail specifically designed against the infectious agents that had been detected. Antibiotics were administered as prostate infiltration using the transperineal approach, guided by transrectal ultrasound. Administration was repeated after 7 and 14 days. Six and 12 months after the last infiltration patients were followed up with uroflowmetry, NIHPSS and PSI. Final assessment of the efficacy of therapy included not only the scores but also the patient's subjective judgement expressed as a "percentage overall improvement". The percentage judgements were arbitrarily divided into 4 classes: 0-30% - no improvement; 30-50% satisfactory improvement; 50-80% good improvement; 80-100% cured.

### **Results**

Statistical analysis of the results showed 65% of patients were included in the fourth group and 17% had obtained no improvement.

### **Conclusions**

We are of the opinion this is one of the more valid therapeutical approaches to chronic prostatitis. Results will undoubtedly improve once drugs such as anti-TNF alpha antibodies are available to be injected into the prostate to inhibit the autoimmune disease process, which in this study was controlled with betametazone.