

## Results Of Our Patients With Prostatitis According To Classification Of American National Institutes Of Health

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### SUMMARY

**Aim:** To evaluate the results of 97 patients with prostatitis classified by American National Institutes of Health (ANIH)(1995) and the efficacy of 4 weeks quinolon & anti-inflammatuar agent treatment.

**Materyal ve Metod:** From July 1998 to May 2000, 97 male attending to our polyclinic diagnosed as prostatitis were analyzed retrospectively. Digital rectal examination (DRE), postmassage urine culture and/or prostatic secret culture and microscopy of prostatic secret records were studied in all patients except 8 who previously diagnosed as chronic nonbacterial prostatitis and refused DRE and analyses at this visit. We prescribed 4 week duration of peroral quinolones and anti-inflammatuar agent for all patients.

**Results:** While 79 (81.4%) patients were married and the others 18 (18.6%) were unmarried. 64 (66%) of them had an educational level of high school or university. According to the ANIH classification, patients in the groups; II, IIIA and IIIB were 4 (4.1%), 12 (12.4%) and 73 (75.3%) respectively. The rest 8 (8.2%) refusing analyses were unclassified. Only 16 (16.5%) patients came to the follow-up visit and 4 of 16 (25%) all in group IIIB treated successfully with the given medication.

**Conclusion:** Prostatitis patients attending to our hospital,were mostly married and had high educational level according to our territory. Though small percent of our patients followed-up, 4 week quinolones and anti-inflammatuar agent seemed to be ineffective. Therefore, we suggested 8-12 week treatment for the groups II and IIIA.

**Key Words:** Chronic prostatitis, classification, treatment

## Amerikan Ulusal Sağlık Enstitüsü Sınıflamasına Göre Prostatitli Olgularımızın Sonuçları

### ÖZET

**Amaç:** Amerikan Ulusal Sağlık Enstitüsü Sınıflamasına (AUSE)(1995) göre sınıflandırılan 97 hastanın sonuçlarının incelenmesi ve 4 haftalık kinolon ve antiinflammatuar tedavi etkinliğinin değerlendirilmesi

**Metod:** Temmuz 1998 ve Mayıs 2000 tarihleri arasında polikliniğimize başvuran 97 hastanın sonuçları retrospektif olarak değerlendirildi. Daha önce başka bir merkezde kronik nonbakteriyal prostatit tanısı konup parmakla rektal muayeneyi ve tetkik vermeyi rededen 8 hasta dışındaki diğer tüm hastaların, postmasaj idrar kültürü ve/veya prostat sekret kültürü ve direkt mikroskopi sonuçları incelendi. Tüm hastalara 4 haftalık peroral kinolon ve antiinflammatuar tedavisi önerildi.

**Bulgular:** Hastaların 79'u (%81.4) evli, 18'i (%18.6) bekar idi. Hastaları 64'u (%66) lise ve üniversite mezunu idi. AUSE sınıflamasına göre hastalar grup II, IIIA ve IIIB'de sırası ile 4 (%4.1), 12 (%12.4) ve 73 (%75.3) olarak yer alırken tetkik vermeyi rededen 8 (%8.2) hasta sınıflanamadı. Hastaların ancak 16'sı (%16.5) kontrole geldi. Bunların 4'ü (%25) -hepsi grup IIIB'de- verilen tedaviden yanıt aldı.

**Sonuç:** Polikliniğimize başvuran hastalar çoğunlukla evli ve bölgemize göre eğitim düzeyi yüksek idi. Hastalarımızın az bir oranı kontrole gelmesine rağmen 4 haftalık peroral kinolon ve antiinflammatuar tedavinin yetersiz olduğu görüldü. Özellikle grup II ve IIIA'da 8-12 haftalık tedavi sürelerini öneriyoruz.

**Anahtar Kelimeler:** Kronik prostatit, sınıflama, tedavi

### INTRODUCTION

Prostatitis is a major health care problem which consumes a significant proportion of the outpatient time of the urology departments. It is the most common

urologic diagnosis in men aged less than 50 years with a prevalence range from 5% to 8.8% (1), resulting in 2 million office visits per year (2). Urologist in United States and Canada see an average of 173 (median, 40) and 262 (median, 132)

patients per year respectively (3,4). As a result this common urologic diagnosis consumes large amount of money and effort in means of research, literature and urological meetings. There has been no validation of the concept of assigning patients to a diagnosis of chronic bacterial prostatitis, chronic nonbacterial prostatitis, or prostatodynia. This traditional categorization of patients leads to mislabeling and affects therapeutic plans and expectations for treatment efficacy. The classification problem was recognized by the 1995 (USA) National Institutes of Health Consensus Conference on prostatitis at which it was suggested that the classification of this disease be changed (5). In this paper we evaluated the efficacy of 4 weeks quinolon & anti-inflamatuar agent treatment by studying results of 97 patients diagnosed as prostatitis classified by American National Institutes of Health (ANIH).

## MATERIAL AND METHODS

From July 1998 to May 2000, 97 male patients diagnosed as prostatitis between the ages 20 and 50 (mean 33.4) in a total of 4400 outpatients were analyzed retrospectively. A full urological anamnesis were reported for all patients. Digital rectal examination (DRE), postmassage urine and/or prostatic secret cultures and microscopy of prostatic secret records were studied in all patients except 8 who diagnosed as previously chronic nonbacterial prostatitis in an other centre and refused DRE and analyses at this visit. All patients results classified as ANIH 1995;

Category I. Acut bacterial prostatitis: acut infection of the prostate gland

Category II. Chronic bacterial prostatitis: recurrent infection of the prostate

Category III. Chronic abacterial prostatitis/chronic pelvic pain syndrome (CPPS): No demonstable infection

IIIA. Inflammatory chronic pelvic pain syndrome: white cells in semen

IIIB. Noninflammatory chronic pelvic pain syndrome: no white cells in semen

Category IV. Asymptomatic inflammatory prostatitis: no symptoms

All patients in category II and III were prescribed quinolon & anti-inflamatuar agent treatment for 4 weeks.

## RESULTS

Of the 97 (range 20-50, mean 33.4) male patients, 79 (81.4%) were married and the rest 18 (18.6%) were unmarried. Most of the patients referred with complaints of pain (suprapubic, flank, penil, testicular), irritative voiding symptoms and genitourinary discomfort. Also feeling of cold at the penis for two and premature ejaculation for three patients were noted. Only one patient added sexual dysfunction for his complaints. Cultures (ejaculate or postmassage urine) positive in only 4 patients and except one (acinobacter) the others showed Escherichia coli and all sensitive to fluoroquinolones. Leukocytosis in postmassage sediment (greater than 10 white blood cells per high-power field) demonstrated in 12 semen samples. Educational status of the patients in two groups: high school & university, and below the high school were 64 (66%) and 32 (34%) respectively. According to the ANIH classification, number of the patients in the groups II, IIIA and IIIB were 4 (4.1%), 12 (12.4%) and 73 (75.3%) respectively(**Table1**).

**Table1: Demographic results and classification of 79 patients according to the ANIH (American National Institutes of Health).**

	Marital status		Education		ANIH		
	Married	Single	Primary education	High school and up	II	II A	III B
n	79	18	33	64	4	12	73
%	81.4	18.6	34	66	4.1	12.4	75.3

Rest of 8 (8.2%) were unclassified due to the refusing of the analyses. The rate of prostatitis patients among the our total urologic outpatients is 2.88%. Only 16 (16.5 %) patients had control visit (4 in IIIA and 12 in IIIB) and 4 (all in IIIB) of 16 (25%) responded with 4 weeks peroral quinolones (Ciprofloxacin, 500mgr orally twice daily) and anti-inflammatories agent and rest of the patients were still symptomatic.

## DISCUSSION

Patients with chronic prostatitis present with pain and variable voiding symptoms (6,7). The pain is generally localized to the deep pelvis and associated with perineal, groin, testicular, penile, back and ejaculatory pain or discomfort. So called chronic pelvic pain syndrome (CPPS) as for the females with interstitial cystitis, is applied to men with chronic nonbacterial prostatitis (Category III A-B) by some authors and supposed to be the similar cause (8). We also observed feeling of penile coldness in two patients' anamnesis. Though we did not report that kind of symptoms, Nickel et. al. suggested that the obstructive voiding in these patients was common and might be partly responsible for the pathogenesis of the syndrome (9). Irritative voiding symptoms had been reported almost all our patients. Sexual dysfunction (6,7) and psychological problems (10) associated with chronic pain syndrome are observed. We think that the low incidence of sexual problems in our group is due to the shame of the patients about this topic in this territory. The quality of life of a patients with chronic prostatitis is surprisingly similar to those of patients with recent myocardial infarction, angina or Crohn's disease (11,12). The low readmittance rate of our patients might be because of the inadequate treatment, discouraging physician visits or the patients view of that no need of readmission if he feels okay. Because of the

inadequacies of diagnosis, poor treatment results, and discouraging physician visits, many patients search for empathetic urologists, being subjected to multiple inappropriate investigations and treatments along the way (13). Thus in our study 8% and 84% patients refused the DRE & analysis and control visit respectively. Our prostatitis patients seems to be highly educated if it is compared to educational level of our territory. The conclusion of that the high education is a risk factor for Chronic Prostatitis shows the similarity with the literature (14). However, Schaeffer AJ et al. concluded that lower education, lower income and unemployment were associated with more severe symptoms (14) The rate of prostatitis among the total polyclinic patients (2.88%) showed similarity with the literature (1.9-5%)(15,16). The rate of the type of the chronic prostatitis represented no differences between married man and single patients. However CP seems higher among married patients.

There has been no validation of the ANIH classification of prostatitis. Until such data are obtained, the possibility that considerable overlap may exist between categories II and III chronic prostatitis must be considered. Signs and symptoms do not certainly differentiate between these categories and category III may be caused in some or many cases by some presumed nonpathogens (i.e., coagulase-negative staphylococci) (18), poorly cultured pathogens (i.e., chlamydia, ureaplasma) (9) or even a cryptic nonculturable pathogen (19-20). Similarly, although it is thought that category IIIB signs and symptoms may not be caused by a prostate problem at all, this has not been confirmed in any study (13).

In the review of the literature, it is advised that all patients in category II prostatitis which a uropathogen is cultured should be treated with definitive antibiotic therapy for a period of 8 to 12 weeks (12). The

most appropriate antibiotics are the fluoroquinolones, trimethoprim and doxycycline and the cure rate is about 50% (12). Patients with recurrent prostatitis, especially if it occurs more than three times per year, should be considered for low-dose prophylaxis (13). In the treatment of category IIIA patients 8-12 week and IIIB patients 4-week duration of empiric antibiotics is recommended (13). In our retrospective study, we had used 4 weeks duration of antibiotherapy for all patients and observed that treated 4 patients of 16 control visits were all in the IIIB group. Thus it is possible that we were failed in the treatment of our patients because of the duration of the antibiotherapy. Addition of anti-inflammatory agents, high-dose alpha-blockers or a short course of a muscle relaxant such as diazepam may be beneficial (13). However, we preferred only anti-inflammatory agents in our clinic. As a result, patients with prostatitis attending to our hospital mostly were married, well educated and at their 4<sup>th</sup> decade. Though small percent of our patients came to control visit, 4 week duration of peroral quinolones treatment seemed ineffective. We suggested 8-12 week treatment especially for the groups II and IIIA.

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