



## Chronic Prostatitis / Chronic Pelvic Pain Syndrome (CP/CPPS)

In our clinical practice, we frequently come across a group of problem in men which often remain inconspicuous. The patients move around several doctors without much benefit. Chronic prostatitis is one of them. It is common worldwide affecting 2-10 % of all adult men (1). In a large population-based Canadian study, 10 percent of the men had CP/CPPS, 7 percent had moderate to severe symptoms (2). The peak prevalence is in the 5th decade, and declines thereafter.

Chronic Prostatitis/CPPS is a clinical syndrome, defined primarily on the basis of urologic symptoms and/or pain or discomfort in the pelvic region. Despite the term "prostatitis," it is unclear to what degree the prostate is involved. According to NIH (1999) classification, which is the best system for research & clinical practice, CP/CPPS falls in Category III.

Pathogenesis of CP/CPPS is unknown; possibly pluricausal, multifactorial mechanisms play the role. A cascade of immunologic, neuropathic, endocrinologic and psychologic mechanism propagate/sustain the chronicity. In a heterogeneous clinical presentation, *pain is the predominant symptom*, mostly at perineum(63%), suprapubic area, penis, testes(58%), groin and low back. Ejaculatory pain (45%) is a prominent & bothersome feature. *Storage and voiding urinary symptoms, pain on voiding, erectile dysfunction & sexual disturbances are common. Associated pain syndromes like IBS, Chronic fatigue syndrome (CFS) and fibromyalgia (3) are also frequent accompaniment.* The clinical course of CP/CPPS is not well-defined (4). The patients usually experience a relapsing-remitting pattern, where the severity and frequency of flares decrease gradually over many months.

**Impact of Pain:** The QOL is remarkably affected in CP/CPPS. Mean QOL scores of CPPS is equivalent to the scores of MI, angina or Crohn disease. *Pain* has more impact than *urinary symptom* on QOL. *Pain severity & frequency* has more impact than *location & type*. Sexual dysfunction is quite prevalent (62%) in men

with CP/CPPS. Regular ejaculatory pain occurs in 24% of CP/CPPS cases and 50% have intermittent. Premature ejaculation (40%) and erectile dysfunction(30-50%) are also common. Mechanism and factors predicting ED in CPPS is unclear. Endothelial dysfunction is a possible link (5) mediated through inflammatory cytokines. Psychological disorders, along with pain, LUTS, "!" QOL may cause sexual dysfunction.

**Evaluation and Diagnosis:** Purpose of evaluation is to 1) Rule out other causes of pain, 2) Look for other associated diseases. 3) Phenotype patients for subsequent treatment using NIH scoring & UPOINT clinical phenotyping. CP/CPPS is a diagnosis of exclusion. Preliminary Investigations include Urinalysis, Urine culture, USG of abdomen with PVR and uroflowmetry. *Localisation of urinary infection can be done by 2-Glass / 4-Glass test.*

National Institutes of Health-Chronic Prostatitis Symptom Index (NIH-CPSI) is a 9-point validated questionnaire that quantifies Pain, Urination, QOL & Impact. *It is the most commonly used system to evaluate & follow-up CP/CPPS symptoms.* Limitations of NIH-CPSI are- *It does not assess some common symptoms; psychological or social abnormalities like rumination or catastrophizing, infection and erectile function.* To overcome the limitations of the NIH-CPSI Shoskes et al. developed a 6-point clinical phenotyping called UPOINT. Each Domain is scored as 'YES' or 'No' (6). The domains are **Urinary, Psychosocial, Organ specific, Infection, Neurological/system and Tenderness of muscles.** UPOINT has limitations that the phenotypes are qualitative, Intensity not being considered and the Sexual dysfunction ignored. *The combined use of NIH-CPSI & UPOINT can more fully assess the clinical characteristics of CP/CPPS.*

Treatment of CP/CPPS is Individualised, Phenotype guided and Multimodal. Suggested therapies are:

1.  *$\beta$ -Blocker therapy as part of a multimodal treatment strategy for newly diagnosed,  $\alpha$  blocker-naive patients having voiding symptoms.*

2. Antimicrobial therapy trial for selected newly diagnosed, antimicrobial-naive patients.
3. Selected phytotherapies: Cernilton and Quercetin.
4. **Multimodal therapy directed by clinical phenotype.** Directed physiotherapy. Although level 1 evidence is not available, evidence from multiple weak trials and vast clinical experience strongly suggests benefit for selected patients.
5. *Psychological Support: CP/CPPS is associated with depression & poor QOL. Behavioral counseling may be beneficial in select patients. A cognitive behavioral program specifically targeting CP/CPPS can improve both symptoms & QOL.*

*Outcome of therapy: None of the therapies can offer marked benefit.  $\alpha$ -Arenergic Blocker & Pregabalin has moderate benefit. Anti-inflammatory agent, phytotherapies, ESWT, TUMT, selected neuro-stimulation provide modest benefit.*

**Conclusion:** *Specific multimodal therapy directed at individual UPOINT phenotypes may result in better management outcomes in CP/CPPS patients.*

---

#### **AKM Anwarul Islam**

Professor & Ex-chairman, Department of Urology, BSMMU, Dhaka

#### **References:**

1. Krieger JN, World J Urol. 2003;21(2):70
2. Nickel JC, J Urol. 2001;165(3):842
3. Rodríguez MA, NIDDKD WG J Urol. 2009; 182(5): 2123
4. Erickson BA, BMJ Clin Evid. 2008
5. Shoskes DA, et al. J Urol. 2011; 186: 907-910
6. Shoskes DA, Nickel JC, Rackley RR, Pontari MA. Clinical phenotyping in CP/CPPS & IC: a management strategy for urologic CPPS. Prostate Cancer Prostatic Dis. 2009; 12: 177-183.