

CathetersPLUS™ Education Series

Prostatitis with
Dr. Curtis Nickel

Below are key highlights from Dr. Nickel's recent presentation on Prostatitis for our CathetersPLUS™ Education Series – an exclusive series of talks on the most important topics in Urology, chosen by you! Please contact your Red Leaf Medical representative for information on how to participate in upcoming sessions.

Description

Category 1 (2%) – Acute bacterial prostatitis characterized as rare and serious prostate and urinary infection.

Category 2 (8%) – Chronic bacterial prostatitis characterized by recurrent urinary infection in men.

Category 3 (90%) – Chronic abacterial prostatitis/chronic pelvic pain syndrome characterized by prostate, pelvic floor, and genitourinary pain with no demonstrable infection.

Incidence

- 3/100 men in urology outpatient clinics have symptoms of prostatitis.
- 9/100 men (per year) have had prostatitis-like symptoms within the last year, most are mild and self-limited.
- 6/100 (per year) men are bothered by prostatitis-like symptoms.
- 3/100 (per year) go to their family doctor because of symptoms to seek treatment/help.

Discussion

- No single effective treatments for all patients diagnosed with prostatitis, but effective management plans.

Diagnosis & Treatment

- Category 1
 - Urine culture.
 - May need catheterization +/- hospitalisation.
 - Antibiotics.
- Category 2
 - Post-prostate massage urine culture in-between urinary tract infections (UTIs).
 - Antibiotics.
- Category 3
 - Exclusion of prostate cancer, bladder cancer, infection, stones, etc.
 - Treatment is complicated.

Management of Category 3 Chronic Prostatitis/Chronic Pelvic Pain Syndrome

- Quality of life studies on patients with category 3 prostatitis show that they have the same quality of life as a patient with type 1 diabetes, active Chron's disease, and congestive heart failure. These patients suffer disability, stress, anxiety, depression, loss of activities and life happiness associated with pain in the prostate and pelvis.

Conservative Therapy

- Education.
- Diet Modification.
- Low impact exercise and stretching exercises.
- Mind games – glass half full rather than half empty.

5 A's of Treatment

- **Antibiotics** can be considered empirically in case there is a deep-seated infection. If they don't work after 4 weeks, no further antibiotics are indicated unless there is a positive urine culture.
- **Alpha blockers** show efficacy that is statistically significant, but not clinically significant in entire population of men with category 3 prostatitis. They are only effective in men with obstructive voiding symptoms (LUTS) such as slow stream, hesitancy, post void dribbling, and difficulty starting associated with prostate and pelvic pain.
- **Anti-inflammatories** have anti-inflammatory and analgesic properties, so they work on patients with pain and inflammation.
- 10-16% of older men with benign prostatic hyperplasia (BPH) also have prostatitis-like symptoms and those men may improve on **5-Alpha reductase inhibitors (5-ARIs)**.
- **Avoidance** in non-bacterial prostatitis may be as simple as avoiding a bicycle seat, tractor seat, wallet in pocket while seated, and other repetitive perineal trauma.

Other Treatments

- Focused **physiotherapy** of the pelvic floor can be a very effective adjunct in men with prostate and pelvic floor pain. Pain can be associated with increased tone or hyperactivity, tenderness, or ligamentous/myofascial pain and directed massage done by a pelvic floor physiotherapist can be extremely helpful.
- **Phytotherapy** or herbal therapy causes no harm and does appear to be better statistically than placebo.
 1. Cernilton (pollen extract) is the most common treatment for prostatitis symptoms in some countries in Europe and Asia. It has shown to have anti-inflammatory and analgesic qualities.
 2. Quercetin, a natural bioflavonoid, has strong immunogenic characteristics and immune suppression, and has shown effectiveness in selected patients.
 3. Saw Palmetto may be of benefit, but only the hexane extracted saw palmetto available in the EU has proven to benefit patients. There are CO₂ and/or alcohol extracted saw palmetto preparations that may be similar to the EU brand Permixon.
- **Neuromodulation options**
 1. The simplest neuromodulation maneuver is heat therapy 20 minutes, twice a day with a high-quality heating pad.
 2. Amitriptyline, an antidepressant, has neuromodulatory characteristics and gabapentoids, like gabapentin or pregabalin, can be beneficial to some men with a neurogenic phenotype, but there are side effects with medication.
 3. Muscle relaxants along with local heat therapy works, especially while waiting for physiotherapy or if the patient can't afford physiotherapy. Options include cyclobenzaprine, diazepam and baclofen.
- **Surgical options**
 1. Surgical removal of the prostate is rarely indicated. Patients may suffer from incontinence and erectile dysfunction, along with their chronic pelvic pain.
 2. Occasionally, in patients with chronic bacterial prostatitis where recurrent and/or chronic infections are associated with prostatic calculi, a radical TURP operation or a simple or total prostatectomy can be considered as last resort.
 3. Urethral stricture causes voiding trauma causing secondary pelvic/prostate pain and can be treated with surgery.
- Traditional guidelines suggest a step wise approach starting with antibiotics, alpha blockers, etc. but this doesn't work well for the majority of patients. Treat each patient as an individual and direct therapy at their unique clinical phenotype.
- Phenotype (UPOINTS)
 1. Urinary → treat with alpha blockers.
 2. Psychological → address depression, etc.
 3. Organ specific → treat with prostate/bladder specific medication.
 4. Infection → treat with antibiotics.
 5. Neurogenic → treat with neuromodulatory therapies.
 6. Tenderness (pain) → treat the pelvic floor.

7. Sexual dysfunction → address sexual dysfunction.
- It's important to recognize the psychological issues these patients have because it affects therapy. Main psychological profile in up to 30% of patients is maladaptive coping behaviour called catastrophizing. The three stages are:
 1. **Rumination** is when the patient is constantly thinking about the pain in the penis, testicles, prostate, etc.
 2. **Magnification** is magnifying the pain, its intensity and the impact it has on their life.
 3. **Helplessness** is the most problematic and once the patient is feeling helpless, they don't do well in therapy without psychological support.
 - The other most common maladaptive coping behaviour to a lesser extent (but is quite common in men with chronic pain) is **solicitous behaviour from others**. It's when a man starts to feel sorry for himself and looks to spouse/partner/friend to do things for him.
 - Another common maladaptive coping behavior is **pain contingent rest** - patient decides that because he's in pain he can't do anything.
 - **Depression** is hard to manage when it's associated with pain, but it has to be identified.
 - Recommend a pain psychologist or sports psychologist, not a psychiatrist.

Keys takeaways:

1. Figure out what's going on and make the diagnosis (determining the clinical picture).
2. Educate the patients that they have this chronic condition, likely not an infection, there is no cure, but patients get better.
3. Diet.
4. Low-impact exercise (swimming, walking, elliptical).
5. Exercises like yoga or mind exercises.
6. Treat organs themselves with medication, surgery etc. But look at other pain generators like pelvic floor, fibromyalgia, IBS, etc.
7. Provide general psychological support (identify and reduce catastrophizing).
8. Set realistic goals (the goal for these patients is not necessarily a cure, but to lessen the symptoms, improve quality of life, their mental outlook and physical activities).
9. Know when to get help from pain clinic, psychologist, physiotherapist, etc. when you've identified phenotype parameters that Urology isn't able to deal with.

Q&A

1. **What are the similarities between pain psychologist and sports psychologist?**

Cognitive behavioural therapy is what both pain and sports psychologists use in a cooperative and participating of patient. Understanding adaptive and maladaptive coping mechanisms, setting realistic goals, and realizing it is not hopeless.

2. What is the difference between pelvic floor physiotherapy patients and those who need pelvic floor injections for pain?

The ideal approach in patients with pelvic floor dysfunctional pain is to treat with heat therapy and local exercises (stretching and yoga) with or without muscle relaxation. If there is a neurogenic component, consider amitriptyline or gabapentin. If there is increased muscle tone, consider muscle relaxants. If that doesn't work seek out the advice of a physiotherapist as to whether internal pelvic floor/wall physiotherapy would be of benefit. If possible, entertain physiotherapy early. If all that fails, injection therapy is the last resort for those identified with prostate, localized neurogenic pain, or muscle/fascial trigger point pain.

3. Does the risk of prostatitis increase for patients with chronic catheterization or therapies for bladder pain syndrome/bladder cancer, etc.?

Yes. The risk goes up for UTIs and the risk of developing prostatitis increases when a male patient has a UTI. For a patient who has developed low grade bacterial recurrent prostatitis, but must continue catheterizing because of neurogenic bladder or cancer treatment, etc. all you can do is prescribe suppressive antibiotic therapy. Consider suprapubic catheterization or a catheter holiday.

4. Why does a 30yo patient present with non-bacterial prostatitis without catheterization, etc.?

It's not understood why some patients develop symptoms and some do not, why or how symptoms get worse or resolve. Mother Nature is a mystery when it comes to chronic prostatitis. All we can do is make the diagnosis and try and help the patient as much as we can. It is usually Mother Nature who effects the cure.

5. What other approaches can you use for a patient who presents with chronic bacterial prostatitis, but antibiotics do not work long-term?

Some of these patients are extremely difficult to cure and this patient profile is one of them. In a case like this, the bacteria are hiding or hibernating in niches in the prostate (localized biofilms), so antibiotics cannot penetrate and kill them. Try a small dose of prophylactic antibiotics (to prevent infection flare ups) or a high dose of suppressive antibiotics in high dose pulses to get rid of and dislodge the bacteria during an acute flareup. This is the only time the bacteria is growing and susceptible to antibiotics. As mentioned, these are the only patients for which prostate gland removal might be beneficial but usually that is only when the bacterial are localized to stones in the prostate gland itself.

Note: if you are a UNC member you may be able to access the CUA CME materials/slides on Prostatitis by Dr. Nickel.