

MMMM

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Topic Diagnosis and Management of Prostatitis

Introduction

Prostatitis is the commonest prostate problem found in men under the age of 50 and the third commonest prostate problem found in men above the age of 50. We look at the various types of prostatitis, the approach to diagnosis and treatment.

Classification

For diagnostic and management purposes, it is useful to the use NIH system of classification and definition of prostatitis:

Category	Diagnosis	Description
I	Acute bacterial prostatitis	Acute infection of the prostate
II	Chronic bacterial prostatitis	Recurrent urinary tract infection and/or chronic infection of the prostate
III	Chronic abacterial prostatitis/Chronic pelvic pain syndrome	Discomfort or pain in the pelvic region for at least 3 mo with variable voiding and sexual symptoms and/or no demonstrable infection
IIIa	Inflammatory chronic pelvic pain syndrome	White blood cells in semen and/or expressed prostatic secretions
IIIb	Noninflammatory chronic pelvic pain syndrome	No white blood cells in semen and/or expressed prostatic secretions
IV	Asymptomatic inflammatory prostatitis	Evidence of inflammation in biopsy samples, semen and/or expressed prostatic secretions, but no symptoms

Acute Bacterial Prostatitis

This form of prostatitis represents less than 5% of all prostatitis cases.

The clinical presentation is very consistent with fever, chills, malaise, rectal or perineal pain and dysuria. Patients may also have symptoms of bladder irritation such as urinary frequency and urgency.

On physical examination the prostate is exquisitely tender. DRE should be done extremely carefully and gently as excessive pressure on the infected prostate could trigger a bacteraemia.

Sexually active men with acute bacterial prostatitis must be screen for STDs. Usual STD related causative organisms are Chlamydia and Gonorrhoea. For men who engaged in insertive anal sex, causative organisms can include E Coli, Klebsiella, Proteus, Pseudomonas and Serratia. The prostate can also be infected by these organism via an ascending urethral infection or intra-prostatic reflux of urine.

The prostate can also be seeded via direct or lymphogenous spread from the rectum or rarely from hematogenous spread. Acute bacterial prostatitis can also results from instrumentation or catheterization.

10% of patient who have suffered from acute bacterial prostatitis will develop chronic bacterial prostatitis and another 10% will develop chronic prostatic pain syndrome.

Rarely, acute bacterial prostatitis is complicated by a prostatic abscess. If patient does not respond rapidly to adequate anti-biotic therapy, suspect a prostatic abscess. The preferred method of imaging is a CT scan as a TRUS of the prostate might cause a bacteraemia.

The mainstay of treatment for acute bacterial prostatitis is antibiotics. Initial antibiotic treatment should be directed at Gm-ve enteric bacteria. Fluoroquinolones and trimethoprim-sulfamethoxazole are good options. Oral treatment must be continued for 30 days to reduce the risk of chronic bacterial prostatitis and prostatic abscess.

- Levofloxacin 500mg – 1000mg OM x 30 days
- Ciprofloxacin 500mg BID x 30 days
- Trimethoprim 160mg + sulfamethoxazole 800mg BID x 30 days

If an STD related bacteria is suspected, add:

- IM Ceftriaxone 500mg stat AND
- Doxycycline 100mg BID x 30 days OR
- Zithromax 1g stat

Alpha-Blockers may also be used in the treatment of acute bacterial prostatitis as it improves urinary outflow and reduces intra-prostatic urinary reflux.

Chronic Bacterial Prostatitis

Chronic bacterial prostatitis is very common and is often confused with chronic abacterial prostatitis and chronic prostatic pain syndrome as these conditions share the same symptomology. 10% of patients who have had acute bacterial prostatitis will develop chronic bacterial prostatitis.

Chronic bacterial prostatitis classically presents as a recurring urinary tract infections in men. The same causative organism can be cultured in expressed prostatic secretions, semen or post-prostatic massage urine specimen.

However, patients with chronic bacterial prostatitis often present with non-specific complaints. These include:

1. Genito-Urinary pain
 - a. Pain in the perineal area, penile tip pain, pain in the testicles, rectum, lower abdomen and lower back.
2. Irritative and obstructive urologic symptoms
 - a. Frequency, urgency, dysuria, poor stream, nocturia and post void dribbling
3. Other symptoms
 - a. Urethral discharge, ejaculatory pain, hematospermia and sexual dysfunction

Physical examination is typically normal. Occasionally, there is a tender and boggy prostate. Rarely, there are prostatic stones that are palpable.

Common pathogenic organisms include enteric Gm-ve bacteria including E. Coli (80%), Klebsiella, Pseudomonas, Proteus and rare Candida. Fastidious organisms such as Chlamydia, Ureaplasma and Mycoplasma may not show up on standard cultures and therefore the patient's condition may be mis-diagnosed as chronic abacterial prostatitis.

Treatment should be tailored to culture and sensitivity results as far as possible. Common treatment choices are TMP-SMZ (30% to 40% success rates) or fluoroquinolones (60% to 90% success rates) for 3 months. If this fails, a low suppressive dose of antibiotics may be given for 6 to 12 months.

- Trimethoprim 80mg + sulfamethoxazole 400mg BID
- Ciprofloxacin 500mg BID
- Levofloxacin 500mg OM
- Moxifloxacin 400mg OM
- Doxycycline 100mg BID (2nd Line)

Other treatments:

- Alpha Blockers
- NSAIDs

- Botox
- Saw Palmetto

There have been reports that co-treatment with Tadalafil 5mg once per day may increase blood flow and therefore drug delivery to the prostate. Simultaneously, it can reverse pathological bio-chemical pathways that contribute to prostatitis including the Rho-Kinase system and the cGMP system. Some patients may however experience a temporary worsening of symptoms as the increased blood flow may cause the prostate to swell and thereby stretch the capsule causing worse discomfort.

The role of ejaculation in the treatment of prostatitis is unknown. However, one theory is that frequent ejaculation can help clear prostatic secretions, reduce bacterial load and reduce the concentration of inflammatory markers. Patients can be advised to ejaculate at least once every 3 days.

Once good symptomatic improvement is achieved and maintained, a follow up test on EPS to document clearance of the infection is recommended.

If complete symptomatic improvement is not achieved, a follow up test on EPS is still recommended to re-establish the diagnosis of chronic bacterial prostatitis. This is because some of these patients may have progressed to chronic abacterial prostatitis or chronic prostatic pain.

Always ensure patients have not been taking antibiotics 2 weeks prior to the test. Antibiotics present in the urine will make the urine sterile and the causative organism may not be cultured.

Chronic Abacterial Prostatitis

Chronic abacterial prostatitis refers to a condition that affects patients who present with symptoms of chronic prostatitis but repeat culture of urine or prostate secretions yield no bacterial growth. This is also known as chronic prostatic pain syndrome. This is further divided into inflammatory and non-inflammatory categories to guide treatment.

Although called non-bacterial prostatitis, the cause still may be a fastidious organism like *C Trachomatis*, *U Urealyticum*, *T Vaginalis*, *N Gonorrhoea*, viruses, fungi, mycobacterium and anaerobic bacteria. Allergies and autoimmune causes have also been hypothesized.

Mechanical causes such as bladder neck or urethral spasm and pelvic floor tension myalgia (levator ani syndrome) have also been hypothesized. Rarely, the cause is carcinoma in situ of the bladder.

10% of patient who have had acute bacterial prostatitis will develop chronic prostatic pain syndrome. Patients at risk of developing chronic prostatic pain syndrome are also patients who have had chronic bacterial prostatitis, UTI and Urethritis.

Chronic abacterial prostatitis can only be diagnosed after infections have been conclusively ruled out. Even in the presence of negative cultures on EPS, a 2 weeks trial of a fluoroquinolone may be indicated.

Treatment of chronic abacterial prostatitis depends upon its symptomology. The NIH Chronic Prostatitis Symptom Score is very useful as it sub-divides the symptoms into pain, urinary and quality of life symptoms.

Treatment options are:

- Tadalafil 5mg OAD
- Gabapentin
- Arcoxia
- Alpha Blockers
- TCA/SSRIs

Patients have to be counselled on the likelihood of a protracted course of treatment. Treatment can be stopped after the patient achieves sustained symptom control. Patients then have to be counselled on the likelihood of recurrence.

Summary

Prostatitis is a very common problem in men of all ages. A careful and coherent diagnostic approach provides management confidence for both the physician and the patient.

Practice Pointers

1. Suspect acute bacterial prostatitis in men who present with UTI symptoms.
 - a. Investigate thoroughly including screening for STDs and fastidious organisms.
 - b. Treat aggressively with antibiotics.
 - c. Follow up closely and extend antibiotic course to 30 days.
2. Suspect chronic prostatitis in men with non-specific genito-urinary and pelvic symptoms.
 - a. Be extra vigilant in men who have had UTI, Urethritis or Acute Prostatitis.
 - b. Rule out infections in EPS.
3. If EPS demonstrate presence of bacteria suspect chronic bacterial prostatitis
 - a. Treat aggressively with an extended course of antibiotics up to 12 weeks.
 - b. Follow up to confirm eradication of infection.
4. If symptoms persists despite absence of bacteria on tests
 - a. Consider a trial of treatment of 2 weeks with a fluoroquinolone
 - b. Choose treatment based on symptomology
 - c. Counsel patients on protracted treatment course and high likelihood of recurrence.

References:

1. Nickel JC. Inflammatory conditions of the male genitourinary tract: prostatitis and related conditions, orchitis, and epididymitis. In: Wein AJ, Kavoussi LR, Novick AC, Partin AW, Peters CA, eds. *Campbell-Walsh Urology*. 9th ed. Philadelphia, Pa: WB Saunders: 2005; Chapter 9.
2. Nickel JC. 5 alpha reductase therapy for chronic prostatitis. In: Nickel JC, ed. *Textbook of Prostatitis*. Oxford, UK: ISIS Medical Media; 1999:333-7.
3. Collins MM, Stafford RS, O'Leary MP, Barry MJ. How common is prostatitis? A national survey of physician visits. *J Urol*. Apr 1998;159(4):1224-8.
4. Kanamaru S, Kurazono H, Terai A, Monden K, Kumon H, Mizunoe Y, et al. Increased biofilm formation in *Escherichia coli* isolated from acute prostatitis. *Int J Antimicrob Agents*. Aug 2006;28 Suppl 1:S21-5.
5. Bergman B. On the relevance of gram-positive bacteria in prostatitis. *Infection*. 1994;22 Suppl 1:S22.
6. Williamson DA, Freeman JT, Porter S, Roberts S, Wiles S, Paterson DL, et al. Clinical and molecular correlates of virulence in *Escherichia coli* causing bloodstream infection following transrectal ultrasound-guided (TRUS) prostate biopsy. *J Antimicrob Chemother*. Dec 2013;68(12):2898-906.
7. Lomberg H, Cedergren B, Leffler H, Nilsson B, Carlström AS, Svanborg-Edén C. Influence of blood group on the availability of receptors for attachment of uropathogenic *Escherichia coli*. *Infect Immun*. Mar 1986;51(3):919-26.
8. Wagenlehner FM, Pilatz A, Bschiepfer T, Diemer T, Linn T, Meinhardt A, et al. Bacterial prostatitis. *World J Urol*. Mar 22 2013;
9. Nagy V, Kubej D. Acute bacterial prostatitis in humans: current microbiological spectrum, sensitivity to antibiotics and clinical findings. *Urologia Internationalis*. October/2012;89 (4):445-450.
10. Nickel JC. The Pre and Post Massage Test (PPMT): a simple screen for prostatitis. *Tech Urol*. Spring 1997;3(1):38-43.
11. Magri V, Cariani L, Bonamore R, Restelli A, Garlaschi MC, Trinchieri A. Microscopic and microbiological findings for evaluation of chronic prostatitis. *Arch Ital Urol Androl*. Jun 2005;77(2):135-8.
12. Meares EM, Stamey TA. Bacteriologic localization patterns in bacterial prostatitis and urethritis. *Invest Urol*. Mar 1968;5(5):492-518.
13. Terrone C, Poggio M, Bollito E, Cracco CM, Scarpa RM. [Asymptomatic prostatitis: a frequent cause of raising PSA]. *Recenti Prog Med*. Jul-Aug 2005;96(7-8):365-9.
14. Granados EA, Riley G, Salvador J, Vincente J. Prostatic abscess: diagnosis and treatment. *J Urol*. Jul 1992;148(1):80-2.
15. Barbaliás GA, Nikiforidis G, Liatsikos EN. Alpha-blockers for the treatment of chronic prostatitis in combination with antibiotics. *J Urol*. Mar 1998;159(3):883-7.
16. Campeggi A, Ouzaid I, Xylinas E, Lesprit P, Hoznek A, Vordos D, et al. Acute bacterial prostatitis after transrectal ultrasound-guided prostate biopsy: epidemiological, bacteria and treatment patterns from a 4-year prospective study. *Int J Urol*. Feb 2014;21(2):152-5.
17. Wagenlehner FM, Pilatz A, Waliszewski P, Weidner W, Johansen TE. Reducing infection rates after prostate biopsy. *Nat Rev Urol*. Feb 2014;11(2):80-6.
18. Aravantinos E, Kalogeras N, Zygoulakis N, Kakkas G, Anagnostou T, Melekos M. Ultrasound-guided transrectal placement of a drainage tube as therapeutic management of patients with prostatic abscess. *J Endourol*. Aug 2008;22(8):1751-4.
19. Chou YH, Tiu CM, Liu JY, Chen JD, Chiou HJ, Chiou SY, et al. Prostatic abscess: transrectal color Doppler ultrasonic diagnosis and minimally invasive therapeutic management. *Ultrasound Med Biol*. Jun 2004;30(6):719-24.
20. Barozzi L, Pavlica P, Menchi I, De Matteis M, Canepari M. Prostatic abscess: diagnosis and treatment. *AJR Am J Roentgenol*. Mar 1998;170(3):753-7.
21. Meares EM Jr. Prostatitis. *Med Clin North Am*. Mar 1991;75(2):405-24.
22. Kabay S, Kabay SC, Yucel M, Ozden H. Efficiency of posterior tibial nerve stimulation in category IIIB chronic prostatitis/chronic pelvic pain: a Sham-Controlled Comparative Study. *Urol Int*. 2009;83(1):33-8.
23. Lee SH, Lee BC. Electroacupuncture relieves pain in men with chronic prostatitis/chronic pelvic pain syndrome: three-arm randomized trial. *Urology*. May 2009;73(5):1036-41.
24. Liu L, Yang J. Physician's practice patterns for chronic prostatitis. *Andrologia*. Oct 2009;41(5):270-6.
25. Ludwig M. Diagnosis and therapy of acute prostatitis, epididymitis and orchitis. *Andrologia*. Apr 2008;40(2):76-80.
26. Nickel JC, Shoskes D. Phenotypic approach to the management of chronic prostatitis/chronic pelvic pain syndrome. *Curr Urol Rep*. Jul 2009;10(4):307-12.
27. Wagenlehner FM, Naber KG, Bschiepfer T, Brähler E, Weidner W. Prostatitis and male pelvic pain syndrome: diagnosis and treatment. *Dtsch Arztebl Int*. Mar 2009;106(11):175-83.
28. Hung SC, Lai SW, Tsai PY, Chen PC, Wu HC, Lin WH, et al. Synergistic interaction of benign prostatic hyperplasia and prostatitis on prostate cancer risk. *Br J Cancer*. Mar 14 2013;108(9):1778-83.
29. Habermacher GM, Chason JT, Schaeffer AJ. Prostatitis/chronic pelvic pain syndrome. *Annu Rev Med*. 2006;57:195-206.
30. Dennis LK, Lynch CF, Torner JC. Epidemiologic association between prostatitis and prostate cancer. *Urology*. Jul 2002;60(1):78-83.
31. Roberts RO, Bergstralh EJ, Bass SE, Lieber MM, Jacobsen SJ. Prostatitis as a risk factor for prostate cancer. *Epidemiology*. Jan 2004;15(1):93-9.
32. NIH Summary Statement. NIDDK Workshop on Chronic Prostatitis, Bethesda, Md. December 1995.
33. Wagenlehner FM, Naber KG. Fluoroquinolone antimicrobial agents in the treatment of prostatitis and recurrent urinary tract infections in men. *Curr Urol Rep*. Aug 2004;5(4):309-16.
34. Pontari MA. Etiology of chronic prostatitis/chronic pelvic pain syndrome: psychoimmunoneuroendocrine dysfunction (PINE syndrome) or just a really bad infection?. *World J Urol*. Apr 12 2013;
35. Weidner W, Diemer T, Huwe P, Rainer H, Ludwig M. The role of *Chlamydia trachomatis* in prostatitis. *Int J Antimicrob Agents*. Jun 2002;19(6):466-70.
36. Wiygul RD. Prostatitis: epidemiology of inflammation. *Curr Urol Rep*. Jul 2005;6(4):282-9.

37. McNaughton Collins M, Pontari MA, O'Leary MP, Calhoun EA, Santanna J, Landis JR, et al. Quality of life is impaired in men with chronic prostatitis: the Chronic Prostatitis Collaborative Research Network. *J Gen Intern Med.* Oct/2001;16(10):656-62.
38. Magri V, Perletti G, Montanari E, Marras E, Chiaffarino F, Parazzini F. Chronic prostatitis and erectile dysfunction: results from a cross-sectional study. *Arch Ital Urol Androl.* Dec 2008;80(4):172-5.
39. Cai T, Pisano F, Magri V, Verze P, Mondaini N, D'Elia C, et al. Chlamydia trachomatis Infection Is Related to Premature Ejaculation in Chronic Prostatitis Patients: Results from a Cross-Sectional Study. *J Sex Med.* Sep 25 2014;
40. Tran CN, Shoskes DA. Sexual dysfunction in chronic prostatitis/chronic pelvic pain syndrome. *World J Urol.* Apr 12 2013;
41. Budia A, Luis Palmero J, Broseta E, Tejadillos S, Benedicto A, Queipo JA, et al. Value of semen culture in the diagnosis of chronic bacterial prostatitis: a simplified method. *Scand J Urol Nephrol.* 2006;40(4):326-31.
42. Nickel JC, Shoskes D, Wang Y, Alexander RB, Fowler JE Jr, Zeilins S, et al. How does the pre-massage and post-massage 2-glass test compare to the Meares-Stamey 4-glass test in men with chronic prostatitis/chronic pelvic pain syndrome?. *J Urol.* Jul 2006;176(1):119-24.
43. Meares EM, Stamey TA. Bacteriologic localization patterns in bacterial prostatitis and urethritis. *Invest Urol.* Mar 1968;5(5):492-518.
44. Magri V, Wagenlehner FM, Montanari E, Marras E, Orlandi V, Restelli A, et al. Semen analysis in chronic bacterial prostatitis: diagnostic and therapeutic implications. *Asian J Androl.* Jul 2009;11(4):461-77.
45. Herati AS, Moldwin RM. Alternative therapies in the management of chronic prostatitis/chronic pelvic pain syndrome. *World J Urol.* Jun 6 2013;
46. Anothaisintawee T, Attia J, Nickel JC, et al. Management of chronic prostatitis/chronic pelvic pain syndrome: a systematic review and network meta-analysis. *JAMA.* Jan 5 2011;305(1):78-86.
47. Shoskes DA, Thomas KD, Gomez E. Anti-nanobacterial therapy for men with chronic prostatitis/chronic pelvic pain syndrome and prostatic stones: preliminary experience. *J Urol.* Feb 2005;173(2):474-7.
48. Kaplan SA, Volpe MA, Te AE. A prospective, 1-year trial using saw palmetto versus finasteride in the treatment of category III prostatitis/chronic pelvic pain syndrome. *J Urol.* Jan 2004;171(1):284-8.
49. Falahatkar S, Shahab E, Gholamjani Moghaddam K, Kazemzhad E. Transurethral Intraprostatic Injection of Botulinum Toxin Type A for the Treatment of Chronic Prostatitis/Chronic Pelvic Pain Syndrome: Results of a Prospective Pilot Double-Blind and Randomized Placebo-Controlled study. *BJU Int.* Oct 13 2014;
50. Meares ET. Chronic bacterial prostatitis: role of transurethral prostatectomy (TURP) in therapy. In: Schmiedt E, Alken JE, Bauer HW. *Therapy of prostatitis.* Munich, Germany: Zuckerschwerdt Verlag; 1986:193-197.
51. Murphy AB, Macejko A, Taylor A, Nadler RB. Chronic prostatitis: management strategies. *Drugs.* 2009;69(1):71-84.
52. Chung SD, Lin HC. Association between Chronic Prostatitis/Chronic Pelvic Pain Syndrome and Anxiety Disorder: A Population-Based Study. *PLoS One.* 2013;8(5):e64630.

Annex 1

NIH Chronic Prostatitis Symptom Score

Prostatitis Symptoms Questionnaire

Name: _____ Date: _____

Date of Birth: _____ Case No: _____

1. In the last week, have you experienced any pain or discomfort in the following areas?

- | | | |
|--|---------|--------|
| a. Area between rectum and testicles (perineum) | 2 - yes | 1 - no |
| b. Testicles | 2 - yes | 1 - no |
| c. Tip of the penis (not related to urination) | 2 - yes | 1 - no |
| d. Below your waist, in your bladder or pubic area | 2 - yes | 1 - no |

2. In the last week, have you experienced:

- | | | |
|---|---------|--------|
| a. Pain or burning during urination | 2 - yes | 1 - no |
| b. Pain or discomfort during or after sexual climax (ejaculation) | 2 - yes | 1 - no |

3. How often have you had pain or discomfort in any of these areas over the last week?

- | | |
|--------------|---|
| a. Never | 1 |
| b. Rarely | 2 |
| c. Sometimes | 3 |
| d. Often | 4 |
| e. Usually | 5 |
| f. Always | 6 |

4. Which number best describes your AVERAGE pain or discomfort on the days that you had it, over the last week?

1 2 3 4 5 6 7 8 9 10

No Pain

Pain As
Bad as
You Can
Imagine

Urination

5. How often have you had a sensation of not emptying your bladder completely after you finish urinating, over the last week?

- | | |
|-----------------------------|---|
| a. Not at all | 0 |
| b. Less than 1 times in 5. | 1 |
| c. Less than half the time. | 2 |
| d. About half the time. | 3 |
| e. More than half the time. | 4 |
| f. Almost always. | 5 |

6. How often have you had to urinate again less than two hours after you finished urinating, over the last week?

- | | |
|-----------------------------|---|
| a. Not at all | 0 |
| b. Less than 1 times in 5. | 1 |
| c. Less than half the time. | 2 |
| d. About half the time. | 3 |
| e. More than half the time. | 4 |
| f. Almost always. | 5 |

Impact of Symptoms

7. How much have your symptoms kept you from doing things you would usually do, over the last week?

- | | |
|------------------|---|
| a. None | 0 |
| b. Only a little | 1 |
| c. Some | 2 |
| d. A lot | 3 |

8. How much did you think about your symptoms, over the last week?

- | | |
|------------------|---|
| a. None | 0 |
| b. Only a little | 1 |
| c. Some | 2 |
| d. A lot | 3 |

Quality of Life

9. If you were to spend the rest of your life with your symptoms just the way they have been during the last week, how would you feel about that?

- | | |
|--|---|
| a. Delighted | 0 |
| b. Pleased | 1 |
| c. Mostly satisfied | 2 |
| d. Mixed (about equally satisfied and unsatisfied) | 3 |
| e. Unhappy | 4 |
| f. Terrible | 5 |

Scoring the NIH-Chronic Prostatitis Symptom

Pain: Total of items 1a, 1b, 1c, 1d, 2a, 2b, 3 and 4 = ____

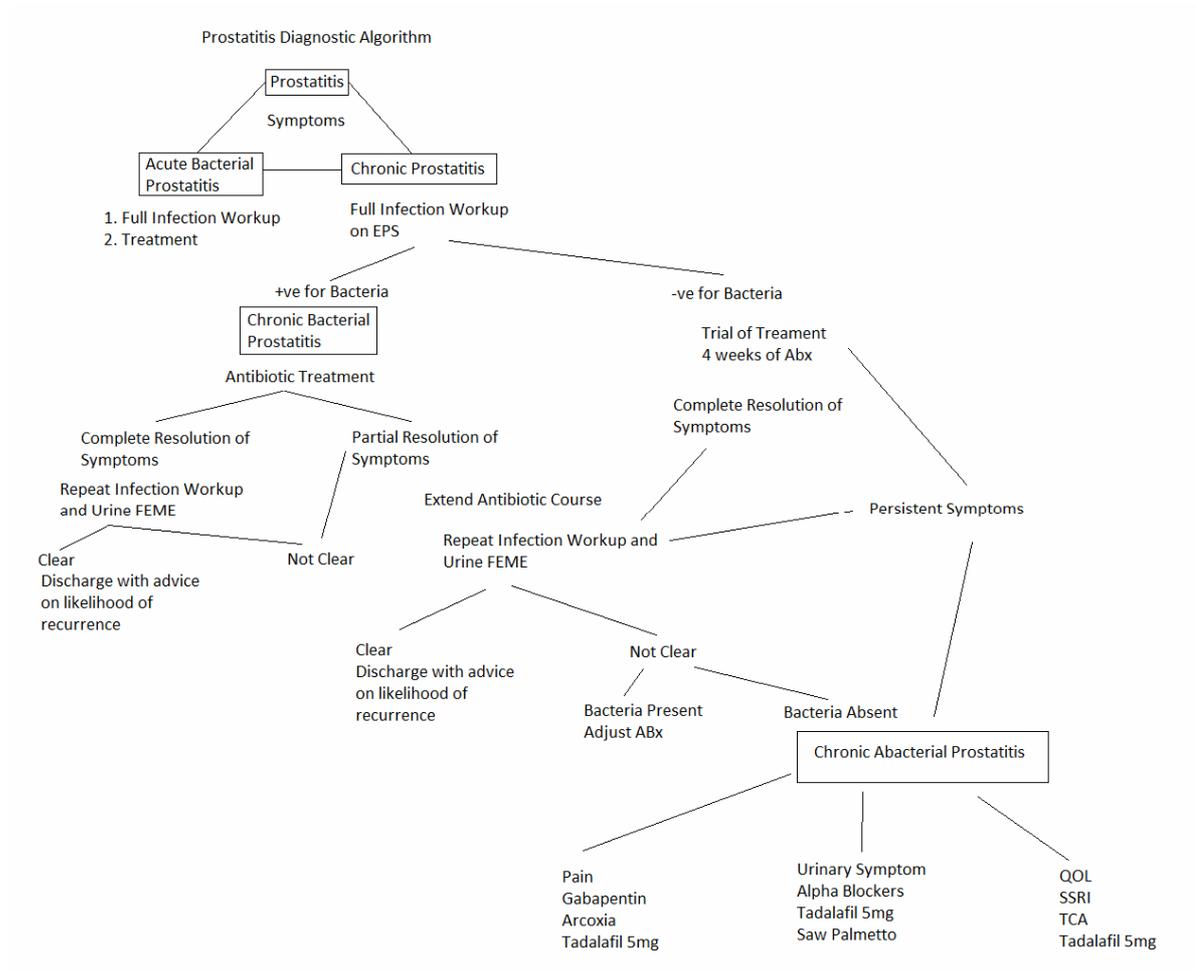
Urinary Symptoms: Total of items 5 and 6 = ____

Quality of Life Impact: Total of items 7, 8 and 9 = ____

The National Institute of Health Chronic Prostatitis Symptom Index (NIH-CPSI) captures the three most important domains of the prostatitis experience: pain (location, frequency, and severity), voiding (irritative and obstructive symptoms), and quality of life (including impact). This index is useful in research studies and clinical practice. (From Litwin MS, McNaughton-Collins M, Fowler FJ, et al: The NIH Chronic Prostatitis Index [NIH-CPSI]: Development and validation of a new outcome measure. J Urol 1999; 162:369-375.)

Annex 2

Prostatitis Diagnostic and Management Algorithm



Annex 3

Obtaining Expressed Prostatic Secretions (EPS)

1. Positioning
 - a. Ideally the patient should be standing with legs shoulder width apart and bent over holding onto the couch
 - b. This position may not be comfortable for the patient or the doctor so a compromise is for the patient to be lying on his side with knees drawn up against his chest.
2. Preparation
 - a. Provide the patient with a sterile cup to collect any pre-urethral secretions that may be extruded during the procedure.
 - b. Place sufficient gel onto a gloved finger.
 - c. Place pressure on the anal sphincter with the tip on the finger at the 6 o'clock position. This helps to relax the sphincter.
 - d. Once the sphincter is sufficiently relaxes, gently insert the finger into the rectum.
3. Diagnosis
 - a. Palpate laterally for any tender spots to rule out Levator Ani Syndrome.
 - b. Turn the finger to the 12 o'clock position and palpate the prostate.
 - c. Take note of the size, consistency and any lumps or stones that are palpable.
4. Express prostatic secretions
 - a. Place firm pressure on the lateral lobes of the prostate and sweep towards the midline.
 - b. Do this bilaterally.
 - c. Then press on the midline. The patient should have a sense of needing to urinate
 - d. Take note of any tenderness of the prostate
 - e. If no secretions were obtained, immediately obtain a first catch urine sample from the patient.