Chronic Prostatitis and Chronic Pelvic Pain Syndrome

PROSTATITIS

Prostatitis is a clinical syndrome. It afflicts men as early as twenty (20) years of age up to as late as 70 years and older. There are four major signs and symptoms: Pelvic pain, Urinary Symptoms, Sexual dysfunction, and Systemic Symptoms (Table 1).

Table 1
Signs and Symptoms

PAIN	URINARY DYSFUNCTION	SEXUAL DYSFUNCTION	OTHERS
Suprapubic	Decrease in force	Decrease in force and volume of ejaculate	Elevated PSA
During urination	Incomplete urination	Bloody ejaculate	Recurrent urinary tract infection
Testicle and during ejaculation	Frequency	Infertility	Joint pains
Perineum	Inability to control urination	Erectile Dysfunction	Insomnia and Depression
Low Back	Urinary Obstruction		Bloody urine

It was formerly classified as Acute Bacterial, Chronic Bacterial, Non- Bacterial, and Prostatodynia (Table 2).

Table 2
1968 Clinical Classification of Prostatitis

	Evidence of Inflammation (EPS)	Culture Positive (EPS)	Culture Positive (Bladder)	Common Etiologic Bacteria	Rectal Examination (Prostate)
Acute Bacterial Prostatitis	+	+	+	Enterobacteriaceae	Abnormal
Chronic Bacterial Prostatitis	+	+	++	Enterobacteriaceae	Normal
“Nonbacterial” Prostatitis	+	0	0	?	Normal
Prostatodynia	0	0	0	0	Normal

What is the situation for Prostatitis?

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In the 60’s, an American urologist by the name of Thomas Stamey said that Prostatitis symptoms will be experienced by up to 50% of men during their lifetime. In addition, he also mentioned that “Prostatitis is a wastebasket of clinical ignorance.”

Clinical Ignorance:

The 1960 Stanford University, land mark medical journal, used a single emptying of retained expressed prostatic secretion (EPS) via prostate massage as a basis of diagnosis. In most cases, the incapability of the massage to extract adequate EPS led to the simultaneous analysis of urine samples that followed the prostate massage, giving birth to the popular segmental culture technique.

Unfortunately, the data derived from this report was based on an unreliable “control group” and a very limited number of poorly scrutinized sufferers. The researchers were not able to take advantage of the benefits of repetitive prostate drainage (RPD) and monitored leucocyte count (MLC) of the EPS; thus, samples were in fact, inaccurate. Bacterial isolation was limited to only two of the seven organisms that can infect the prostate. In effect, most cases were interpreted as “Non-bacterial” or “Prostatodynia”, meaning, no organism was isolated and white blood cell count seen from the EPS was low. This erroneous study was never properly peer-reviewed and worse, it was wrongly thought to be the “gold standard” for the diagnosis of Prostatitis.

Patients Became Chronic Sufferers:

Consequently more than 80% of men diagnosed with this ailment are either told to live with the discomfort for life, or are referred for psychiatric evaluation. The sufferers, unfortunately, end up with a quality of life similar to patients with other chronic debilitating diseases.

What did the Sufferers do?

In the early 90`s an American non-profit organization, known as the Prostatitis Foundation emerged. The foundation bolstered sufferers and physicians to urge the US National Institute for Health (NIH) in lobbying for funds to conduct meaningful researches that would lead to a resolution of this problem.

Actions taken by the National Institute for Health (NIH)

By 1998, the NIH formed the International Prostatitis Collaborative Network. Members of the network agreed on a new definition and classification. This classification was divided into categories (Table 3). The new NIH definition and classification aimed to serve as the bedrock for future international studies to determine the causes and form optimum strategies in patient management.

The NIH collaborative network encouraged physicians and medical researchers all over the world to submit studies to the US NIH. Theories included autoimmune response (body attacks itself), muscular dysfunction, presence of undetectable parasites, viral infection, inability of antibiotics to penetrate the infected gland and many more. The Manila Genitourinary Clinic presented The Manila Protocol to the American Urologic Association (AUA) in 1997, and later to the US NIH in 1998.

Table 3
NIH Consensus Definition and Classification "Prostatitis"

NIH Classification	DEFINITION
CATEGORY I Acute Bacterial Prostatitis	Acute Infection of the Prostate Gland
CATEGORY II Chronic Bacterial Prostatitis	Recurrent infection of the Prostate
CATEGORY IIIA Inflammatory CPPS	White cells in semen/EPS/Voided Bladder Urine 3 (VB_3 or post-prostatic massage)
CATEGORY IIIB Non-inflammatory CPPS	No white cells in semen/EPS/VB_3
CATEGORY IV Asymptomatic Inflammatory Prostatitis	• Abnormal semen analysis • Elevated PSA values • Incidental findings in biopsied prostate

THE MANILA PROTOCOL

1998 NIH presentation, later edited in 2015.

Introduction:

Technically, Prostatitis is defined as "inflammation of the prostate gland." This means that there will be an increase in white blood cell (WBC) from the expressed prostatic secretion (EPS). Accurate diagnosis cannot be made based on symptoms alone. It is said that approximately 50 to 80% of men will experience symptoms of prostatitis at some point in their lifetime. Of the majority of men diagnosed with Prostatitis, only 20% may actually be helped. Yet, most of these patients are never examined for an increase in WBC in their EPS. This may likely be the reason why the condition has become so common and yet the exact etiology and pathophysiology still remain uncertain. This dilemma indeed is bewildering.

How Prostatitis and other Prostate diseases Develop (Pathogeneses):

A strategy that I will discuss is based on the hypothesis of infection, inflammation, congestion, clogging of the prostatic duct, dilatation of the infected gland (Figure 1). As a consequence, prostate muscles are irritated causing the recurring pelvic symptoms. The prolonged over-activity of prostate muscles soon after causes enlargement or hypertrophy, a condition called "Benign Prostate Hypertrophy" (BPH). The rationale behind this premise is basically due to risk factors we gathered in our data collection from patients with chronic prostatitis (CP).

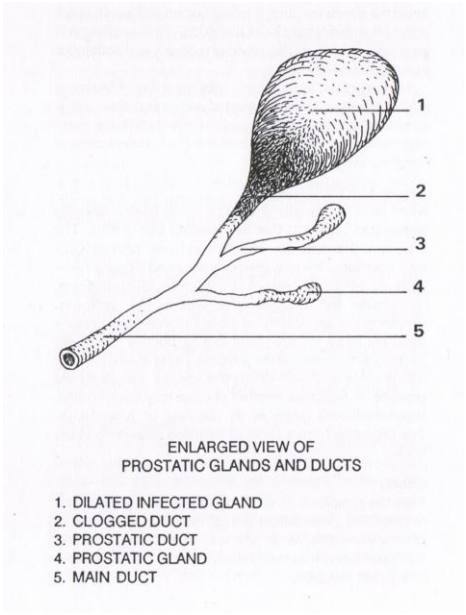

Figure 1

We talk of symptoms, controversies of pathology, and different modalities in management. However, I am unaware of any recent study (1998) that scrutinizes risk factors. Yet, this is an essential key in unraveling the enigma of any medical problem. I would like to say that typical CP patients that we see are the following: (1) those would have several previous medical consults; (2) those whose diagnosis of CP were based on symptoms alone; or the most common, (3) those that had antibiotics and more antibiotics. We are therefore forced to formulate a scheme wherein we take a step backward and retrieve more data from the patient, listening through the problem and the circumstances surrounding the condition with an open ear. We prudently assess relevant medical information we can pick up from them. What are the risk factors?

From the patient profile, age ranges as early as twenty-five (25) to as late as 80 years old. A stepladder increase is seen starting at the age group of 40 years old and above. Most are married, and their occupation entails frequent travel. In the history of present illness, we often ask what instance took place that may be associated with the disorder. Past health history would reveal previous episodes of reproductive tract infection (RTI), urinary tract infection (UTI), and irresponsible use of antimicrobials, sexual partners having recurrent UTIs, yeast infection, and use of oral contraceptives.

Sexual debut of CP patients often occur during their teens with more than five different partners prior to or even during marriage. Inquires to sexual practices such as of fellatio and others contribute in the assessment of risk factors. Take note that in some medical literatures throat organisms has been blamed to cause prostatitis with the concept that these organisms reach the prostate hematogenously. I find this rather difficult to accept for obvious reasons.

By assessing risk factors we should be able to determine the harmful agents that came into contact with the susceptible host. Sub-clinical ascending infection is by far the most logical reason. It may be the main triggering mechanism in the pathogenesis of CP. Why would antimicrobials work only partially? Symptoms improve, only to recur. Perhaps the exact pathogen was not identified. RPD, MLC of

the EPS, was not taken advantage of. The regular sexual partner was left ignored. We are aware that 85% of women with Chlamydia are asymptomatic and 70% of 'healthy women' are hosts of Ureaplasma urealyticum. It took more than 10 years of debate whether or not this organism is pathogenic.

What can be missed out during physical examination? It is not unusual to find an unsuspecting CP patient to have a scanty, clear, mucoid urethral discharge. The prostate gland is often congested, not necessarily tender. There may be an increase amount of EPS that may be cloudy in appearance (Figure 2). We also learn from previous patients that the collections of specimen in most cases are done by technicians and not by the physician. Most are also unable to extract prostatic fluid. It has been mentioned that Urology residents today are not taught how to do proper prostatic drainage.

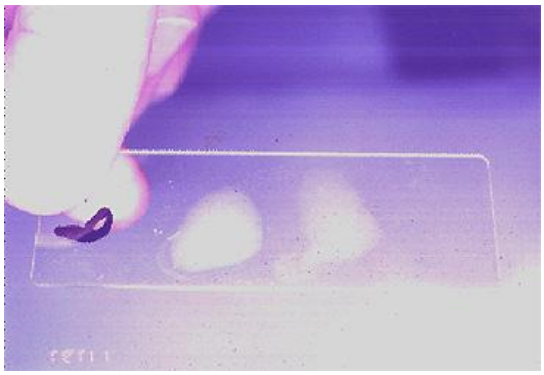

Figure 2

Early in my training, I was neither aware nor taught for the need of specific broth, culture media required to grow different organisms.90% of CP cases is though to be non-bacterial. The latest technology for identifying the presence of microorganisms might just decrease this number today. Investigators in the 60`s would have been overwhelmed had they been equipped with the Antigen-antibody, DNA amplification technique in the identification of microorganisms during their time. What was non-bacterial then, would be bacterial today. The same can be said for Prostatodynia.

These are the effects of Repetitive prostate drainage, Monitored leukocyte counts Use of Target Specific antimicrobials on CP patients (The Manila Protocol)

During the first drainage, the leukocyte count of the EPS often shows results below the threshold of what is normal (Prostatodynia) (Figure 3, drainage number 1). By continuous drainage of the prostate every 2 days or even daily, leukocyte count rises significantly. On the 5th drainage, most patients would have counts above the normal values (Prostatitis) see (Figure 3, drainage number 5). Many patients will experience relieve of their symptoms without antibiotics at this point of time. Complete microbiology is usually conducted on the 5^{th} drainage where most inflammatory debris and pathogens are expelled from the congested prostate gland. Whether or not the condition is bacterial or non-bacterial will now depend on the type and quality of microbiologic work-up done at this point. This means that test results may turn out negative simply because of improper collection, timing and selection of specimen for microbiology.

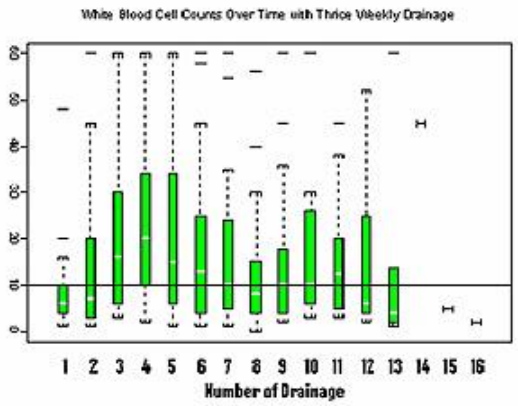

Figure 3

It would be intriguing to compare the effects of the traditional treatment today versus the abandoned ancient repetitive prostatic drainage in terms of duration of treatment, diminished symptom score, and durability of treatment. In our clinical setting with Filipino patients, we have published the duration of treatment between fourteen (14) to 32 days. It seems no one responds earlier than fourteen (14) days. Average curing time is seen in twenty-one (21) days. Rotation of antimicrobials short of fourteen (14) days is irrational, harmful, and will result to withdrawal of an effective antimicrobial too short. The end effect then causes mutations and emergence of durable, multi-drug resistant strains.

From here, a treatment plan can be formulated. A combination of sensible use of target-specific antimicrobials, repetitive prostate drainage, and monitored leucocyte count of the EPS should improve the diagnosis while shortening the time of antibiotic exposure. Improved cure rates with durability of treatment can also be expected. Patient counseling and education also plays an important role in the well being of the sufferer. After all, CP patients are often confused and depressed. Who wouldn't be? Being told that nothing can be done and that it is a lifetime condition is enough to rattle anyone. Even the sickest person gets by with a lot of positive reassurance. Contact-tracing and medical management of the regular sexual partner should also make the treatment durable.

THE MANILA PROTOCOL IN 2015