

## **MEditorial July 2009**

### **“My Prostate Hurts”**

Pain perceived by men to be coming from their prostate is one of the more common issues seen in a general urologist’s office. The word “prostatitis” is, I feel, used somewhat too loosely to describe many pelvic pain syndromes, *the majority of which are not due to inflammation or infection of the prostate.*

The prostate, which produces most of the semen, is located at the bottom of the pelvis and rests atop a “carpet” of muscles joining the bones of the pelvis, known as the “pelvic floor”. The pelvic floor, containing nerves running from the spinal cord to the pelvic organs, actually separates the pelvic part of the abdominal cavity (where the “internal” male genital organs reside) from the perineum, the “external” genital location. The rectum is in back of the prostate and the bladder mostly above it. The prostate surrounds the very first part of the urethra (urine tube ultimately exiting penis) as it comes out of the bladder. Chronic enlargements of the prostate thus make it difficult to urinate over the long run. Inflammations or infections (acute “swellings”) can more suddenly make it hard to eliminate urine--and often cause pain, too.

True bacterial infections of the prostate probably arise from pathogenic bacteria within the male urethra; and are not usually sexually transmittable. Some men’s urethras are likely colonized by types of bacteria more likely to cause disease than others’; this, in association with poorly understood (sometimes temporary) immunologic problems, such as underproduction or weak activity of certain classes of immunoglobulins (e.g., IgA), may lead to acute illness. Symptoms include onset, usually over 12-24 hours, of urinary frequency, urgency, burning with urination, pain behind the pubic bone and/or between the rectum and anus (area known as the perineum) ; and in more severe cases, gross blood in the urine and chills/fevers/muscle aches and flu-like feeling. Like any illness, there can be great variability in the manifestations of prostatitis. In mild cases, the disease is easily confused with other conditions (see below). It would be

difficult to tell a man that he has prostatitis if one or more of the following (in addition to the symptoms as stated) are not present: abnormal urinalysis often showing white and red blood cells--and sometimes bacteria; tender/boggy\* prostate on digital rectal exam; abnormal urine culture, or abnormal blood culture. Cultures take a few days to return from the lab--and treatment may be needed right away, while these are pending. A complete blood count--especially with the white blood count elevated-- is good supportive evidence for an acute bacterial prostate infection. Some men lacking objective evidence are treated with antibiotics just based on the symptoms—improvement on antibiotics in such cases may be “real” or a placebo effect.

*\*Boggy refers to a mushy feeling and is akin to a sponge full of water as opposed to one squeezed dry.*

The term “chronic prostatitis” again implies inflammation of the organ, often with more low-grade symptoms off-and-on over many months or years. We really do not know if such an entity exists. If it does, it may represent abnormal healing after a bout of acute bacterial prostatitis with permanently unhealthy prostate tissues. This presentation is far less responsive to antibiotic therapy, even though some urologists will try a prolonged course of antibiotics, e.g., 4-12 weeks’ worth. I try to avoid that approach. Remember long-term full-dose antibiotics are associated with potential for significant complications.

Recurrent acute prostatitis is a term mistakenly used interchangeably with chronic prostatitis. Some men do get repeated attacks of (documented) acute bacterial prostatitis. Each episode may warrant antibiotic therapy; and many of these men will benefit from chronic low-dose antibiotics, e.g., 1/3 to 1/4 the therapeutic dose, to prevent episodes presumably until the man’s immune system recalibrates and is able to “defend” the prostate against bacterial invasion. Low dose antibiotic courses may be from 3-6 months; and occasionally, literally, for years.

Other pain syndromes grouped with prostatitis and more likely pelvic floor disorders. The terms “prostatodynia” and “chronic abacterial prostatitis” have mostly been supplanted by the nomenclature of pelvic floor disorder. There may be aberrant neurologic signals emanating to and from the pelvic floor muscles which in turn cause low grade spasms of these muscles: manifestations can overlap prostatitis, but are usually more chronic and milder. Men who have this condition can have some difficulty with urination and defecation--but mostly vague aches in the deep pelvis and perineum, as well as nonspecific pains (without objective findings) in the scrotum. Pelvic floor disorders may linger for years and do not respond to antibiotics. The condition is neither a sign of, nor does it progress to any serious illness. Muscle relaxants do not usually help, since such drugs would not selectively relax only these muscles. Sometimes, as is the case with “chronic” prostatitis, certain other medicines will help: these include alpha-blockers such as Flomax; anti-inflammatory drugs such as Ibuprofen; some antidepressant drugs; and “herbal” type anti-inflammatories/anti-oxidants such as Quercetin. Some physical therapists can help men who do not relax their pelvic floors. InterStim (Medtronic) , an implantable pelvic floor stimulator, may play a role in severe cases--but the evidence is still controversial and the procedure is costly. The “modest” success rate of such a procedure may be more related to “patient selection”, that is, we need get better at separating out someone with a true pelvic floor disorder from those suffering other entities.

There are causes of “referred” pain to the prostate and perineum. Recently a younger man presented to me with these vague symptoms. In getting a CT to look for occult urinary stone disease (one “long shot” cause) , we discovered avascular necrosis of both hips, a rare condition causing pelvic pain (more often “bony” in quality) and often requiring hip replacement surgery.

To diagnose “soreness” in the prostate area, I believe a thorough exam (including digital rectal) is the best way to go. Lab tests (e.g., urinalysis and urine

culture) are needed when actual infection is suspected. PSA (blood test for prostate cancer) should be checked as a routine for men in an age/ethnic group susceptible --even though prostate cancer's symptoms rarely overlap with the others discussed above. If a man has these things done and they are normal, it is relatively unlikely that other more complicated tests, such as cystoscopy, transrectal ultrasound of the prostate, random prostate biopsies, or pelvic CT/MRI will show a significant disease.

The disappointing news is we do not understand well (and therefore have few specific treatments) for men with chronic pelvic pain syndromes. The good news is that most of these conditions, even if not amenable to specific treatments, are not serious--and are not predictive of future prostate cancer, etc.