Prostatitic Stones and Chronic Prostatitis
Researched by Charles (Chuck) Maack – Prostate Cancer Advocate/Activist

First, here is information from Johns Hopkins Health Alerts regarding CHRONIC PROSTATITIS:

Prostatitis is a condition found in adult men, with no respect to age, race, or nationality. It's estimated that as many as 14% of adult American men will at some point go to their doctor complaining of one or more of the symptoms that doctors now believe constitute a diagnosis of prostatitis. How do you know if you have prostatitis? Dr. Richard B. Alexander explains what prostatitis feels like.

Q. What are the main complaints of men with chronic prostatitis?

A. Pain in the pelvic region that lasts more than three months is the primary symptom. Men may say they feel like they are sitting on something like a peach pit. Many patients also experience pain during or after ejaculation. Symptoms such as urinary frequency or discomfort during urination may also be present.

For some men, the pain of chronic prostatitis is so debilitating that they are simply unable to function normally. More than two thirds of men with chronic prostatitis have reported episodes of major or minor depression because of the disease.

Q. Is the pain associated with chronic prostatitis relatively constant, or is it provoked or intensified by certain activities?

A. The pain of chronic prostatitis is highly variable, depending on the patient and his specific circumstances. It may range in intensity from just mild discomfort (a 1 on the NIH-CSPI scale) to the worst pain you can imagine (a 10 on the pain scale). The most common sites of pain are the perineum (the region between the genital area and the anus), the testicles, the whole penis, the shaft or tip of the penis, the suprapubic area (the mid-lower abdomen), and the lower back. The pain can occur at several of these sites or at one pre-dominant site.

To fulfill the diagnosis of chronic prostatitis, the pelvic pain has to last more than three months. Although this may seem like an arbitrary time frame, that's how we currently define it. The pain of chronic prostatitis tends to wax and wane -- some
days it is worse than others. There's not really a good explanation as to why that is. Pain after ejaculation is common and is the most specific symptom that distinguishes men with chronic prostatitis or chronic pelvic pain syndrome from men with other prostatic conditions.

For those to which rectal bleeding is the result of prostatitis, consideration could be given to hyperbaric treatment. More in this regard here: http://tinyurl.com/olqo25o as well as here: http://www.ncbi.nlm.nih.gov/pubmed/24416567

PROSTATIC STONES:

A patient brought to mind that we hear little about “Prostatic Stones” and suggested I add information on this chapter “Observations” page. After reviewing several papers, I decided a good read between physicians and patients that provides a better understanding is below and comes from this URL:

http://www.prostatitis.org/stones.html

Prostatitic Stones and Chronic Prostatitis

Note: As with a number of other pages on this site, this page is compiled from patient postings to the newsgroup sci.med.prostate.prostatitis. Many of the comments are anonymous. Check with your own physician. See additional proviso at the bottom of the page.

Keywords: prostatitic stones calcifications urine reflux calculi corpora amylacea Kidney lithotripsy EPS drainage magnesium calcium

Doctors on this page:

- Dr. Richard Alexander
- Dr. Ivo Tarfusser
- Dr. David Casey
Many men have stones in their prostate including myself. I am different in that some of my stones break up and come out in my urine. The doctor's say that this occurs in about 1 in 100 cases. It can be uncomfortable sometimes as they are coming out. The only thing I can attribute the calcifications(stones) breaking up is because I take magnesium everyday. Magnesium is used to prevent and break up kidney stones. I am not a doctor, but you might want to try taking magnesium. I too, even though I have gravel in my urine, still have discomfort on the left side of my prostate.

From: Elliott

Prostatic calculi or stones are thought by a number of people in the medical community to be responsible for a certain percentage of the cases of chronic prostatitis. As hard as it is to drive an infection from the prostate, it's harder still to get them out of the stones once they are dug in. It is estimated that about 75% of middle aged men have them. Molecular analysis has shown that the stones contain ingredients that are generally found in urine not prostatic secretions. This would indicate reflux of urine into the prostatic ducts.

From: Alan

I have been taking modest magnesium
supplements for some time to avoid kidney stones repeating I produced one some years ago. The hospital supported my suggestion (not theirs!) of magnesium supplements, and it seemed to work, and they were surprised that I did not continue producing stones as they expected.

I am now taking zinc and more magnesium in addition to other things partly on nutritional advice.

The hospital nutritionist at the time thought magnesium would help because all magnesium salts were soluble, unlike calcium salts (my kidney stones were calcium oxylate mostly).

Recent nutrition advice to me from elsewhere was that magnesium is important to help the body keep calcium in the right places.

From: Andy

If you do take Magnesium supplements to aid in the breakdown of stones, make sure it's balanced with zinc since magnesium will deplete the zinc level in your system. There are supplements that contain an appropriate ratio of the two.

From: Dave

Dr. Richard Alexander (back to top) of the University of Maryland was kind enough to explain prostate calcifications to me and has given me permission to forward this to the group.
Stones in the prostate are very common. They appear to be calcified proteinaceous bodies called corpora amylacea. They are thought to occur because the secretions of the prostate cannot get out of the gland because of the disarray of the architecture of the ducts due to BPH or benign prostatic hypertrophy, an almost universal growth of the prostate in men as they age. It is thought that these secretions dry out or become "inspissated" and form into a round proteinaceous body, much like a pearl in an oyster. They then become calcified.

This is not the only mechanism leading to the formation of prostate calcifications. They may appear secondary to an infection with insufficiently drained pus and detritus, eventually calcifying. Other calcifications, usually more widespread, can show up in the tissue surrounding the prostatic glandular units following an inflammatory process associated with tissue destruction or changes in the local biochemical environment (acidity, electrolyte changes). Finally, calcifications detected in the prostate can be located intraluminally inside the ejaculatory ducts, resulting from calcification of detritus in the seminal tract, eventually moving down into some narrow segment of the ejaculatory duct.

Prostatic stones are very common and generally do not cause symptoms in and of themselves but may be associated with the symptoms of BPH which men can get as they age and their BPH progresses. The stones are usually located between the BPH growth or "adenoma" and the compressed, normal prostatic tissue around the adenoma which is called the "surgical capsule" of the gland because it is the limit of resection of BPH when performed transurethrally. Stones
in the urinary tract are completely different. These stones are found in the kidney where they form and can cause symptoms when the stone "passes" by moving down the ureter, the muscular tubelike structure that connects the kidney to the bladder. The presence of the stone, if it is large, in the ureter causes blockage of the ureter and "urethral colic", a spasm type pain that is severe and is often described by my patients as the worst thing they have ever felt in their lives. Kidney stones form from the urine and are often associated with some sort of metabolic problem that predisposes the patient to forming stones but this is not always the case of some patients simply form stones for no reason that can be elucidated. Kidney stones can sit in the kidney for years and not cause symptoms but can become infected and be a persistent nexus or source of infection for years. Typically infection stones are a different type of mineral and the infection cannot be cleared without removing the stone. It is possible that prostatic stones could be the same, that is, they could serve as a source of persistent and recurring infection in prostatitis. The only thing that makes me less enthusiastic about this possibility as an explanation for the relapsing and recurrent symptoms of prostatitis is that so few patients with prostatitis have a bacterial infection documented to be present in the urine or prostatic secretions. In large series of men a bacterial infectious etiology is found in only 510% of men. Unfortunately, urologists have concentrated on this subpopulation because it represents something they can treat but still does not appear to be relevant to 90% of men with the symptoms but no infection.

Many patients have had symptoms and several courses of treatment long before a culture has
been attempted. The microorganisms may have been killed, but, without removal of obstruction, the inflammatory process may continue in the affected gland. This chronic inflammation may, eventually, live its own life, either due to persistence of highly resistant clones of microorganisms in low concentration and/or inflammatory reaction to products of the immunological defense mechanism and/or inflammatory reaction to glandular secretions/pus/detritus which cannot escape. Therefore, cultures from prostatic expressed secretion may not yield a positive result. Furthermore, even in presence of microorganisms in high = culturable concentrations, the culture may be (permanently or temporarily) negative if the process is sealed off by a stone or scar tissue.

From: Ivo Tarfusser, MD (back to top)

Why do obstruction not always cause pain? Obstruction may develop gradually, as in patients with slowly growing BPH tissue allowing the sensory nerve endings and reflexes to adapt. There are also completely asymptomatic cases of kidney obstruction, by stenosis or, less frequently, by stones. Urinary retention can be painless if the bladder dilates gradually (in these cases also the ureters and the kidney pelvis are often grossly dilated without generating discomfort), or can cause severe pain if it appears suddenly. On the other hand, the urinary flow is much higher than the amount of prostatic secretions, causing a much faster buildup of pressure in the kidney than in the prostate, hence resulting in dramatic symptoms.
The only instance where there is a sudden increase in pressure in the seminal tract is at ejaculation. In this case, it is conceivable that pressure in the prostate may be attenuated by nonobstructed acini emptying normally. More marked discomfort at ejaculation, or even colicky pain, is highly suggestive of the presence of an obstructing mechanism in the outlet of the seminal tract, whether it is a stone, inspissated detritus/secretion, a utricular cyst or a dynamic mechanism like a kink/uncoordinated contraction of the seminal vesicles.

I am aware that much is still unknown and many of these possible mechanism have still to be studied in detail to be confirmed or rejected. But simple physical laws and the knowledge of biochemical mechanisms occurring elsewhere in the body can serve as useful starting points for trying to understand this elusive syndrome.

From: saltsage

My uro has diagnosed me with "multiple stones" as the main reason for my almost constant pain and discomfort. He has prescribed Cipro and then Floxin, both without success. All he has done is to check me with his digit and an x-ray of my prostate as well as urine tests. Nothing else.

He has recommended surgery as a solution. The only side effect would be that I would not ejaculate anymore.

Is this doctor doing and recommending the best for me? He has never asked for any seminal samples. As I am on an HMO, I have to get recommendations from my primary doctor to
see anyone else and even he seems somewhat uncooperative on this.

From: Jonathan

I think Surgery should be the last resort. Losing your ability to ejaculate would be a bummer and there is no guarantee it will make you feel better. Dr. Dankoff has a procedure where he anaesthetizes (sp?) a patient and does a very aggressive massage to try and break up some of the calcification.

I realize your HMO might not pay for this but we are talking about a procedure that could make you feel better and wont do any permanent harm the way it sounds this surgery will.

From: Anonymous

In some men these stones appear to cause no problem, while in others it leads to prostatitis. Many factors probably determine which is the case. For example, if blockage doesn't occur and the stones successfully isolate the pathogen then essentially the problem is isolated and no symptoms show. In other cases blockage may occur with successive releases and reblockage due to reinfection. This leads to the up and down prostatitis symptoms. In yet other cases the blockage never unclogs leading to chronic and continuous symptoms. Question: If stones are a problem is there anyway they can be broken down like kidney stones with ultrasonic waves or any other noninvasive means? Only by a manual digital drainage of the prostate.
Ultrasonic waves don't appear to have sufficient force to open up the ducts and release blockage. In any case, if there is still live pathogen in the ducts the symptoms will simply reoccur and the treatment will give only temporary relief. This is why cultures and tests must be done to detect the pathogens and have the proper medication used to kill the pathogen while prostate drainage is done. A post by a prostatitis sufferer to sci.med.prostate.prostatitis: I was diagnosed with chronic prostatitis eight years ago. About two years ago, I noticed sand in my urine. I saw two urologists. After tests, they both said it was coming from my prostate. They said it was calcifications. They also called it sand or chip offs. They said it was good that it was coming out. Since it began, it usually happens about one day every three weeks. It is usually at the end or the beginning of the urine cycle. I do not have any pain, except if the sand gets stuck at the tip of the urethra at the end of the urine cycle. I then must try and urinate again to relieve it. On occasion, a few pieces of sand were in my semen. Does anyone else have any of these symptoms? I would love to hear

From: Elliott

Joe, in my case it was my urologists remark (during a TRUS) that I had a fair amount of stones that lead me to the research that turned up "upon analysis many prostatic calculi were found to be made up of the same ingredients as found in urine", which led to (see my post...Allopurinol and me) Do you have any reason to believe this patient may be refluxing urine into the prostatic ducts. In my opinion, you don't really need to have a high level of uric
acid to cause a problem, if you do have reflux. BTW my stream is improving too. First time in 8 years. I'm now split only 50% of the time, instead of always. In my mind that translates into less inflammation.

From: Anonymous Doctor (back to top)

From this morning. A 43 year old man with intractable prostatitis has been under my care for several months, with no improvement noted. Today, he received general anesthesia, whereupon he had a REAL rectal massage (the nurses were wincing), multiple cultures, cystoscopy, and transrectal ultrasound. Interestingly, massive amounts of intraprostatitic calcifications were seen. Often these are seen in small amounts, but this guy's prostate was LOADED. This explains to me why I wasn't having much success, and hopefully the drainage today will help open these areas up. As I have stated here and on the WWW site previously, it is crucial that complete urological evaluation is undertaken, so as to not miss something.

Hypothetical scenario: These calcifications were once corpora amylacea. Before that, they were ordinary prostatic secretions (PS). The conversion was initiated by the failure of the PS to be expelled normally during orgasm. This, in turn, was a consequence of some obstruction. Since calcification is regarded as a response to infection, either the obstruction was a consequence of infection or it led to infection.

Questions:

(1) Would TRUS have revealed these
calcifications? Or some other imaging technique? (2) Could such imaging be useful in the diagnosis of prostatitis?

John, It was during my TRUS that my Uro mentioned to me that I had quite a number of prostatic calculi (stones), and that's when I started researching them and found out that quite often they are made up of the same ingredients found in urine, which lead to my Allopurinol research. All I can say is that I am pain free for the first time in 15 years.

During my TRUS, my uro also noted that I had a number of prostatic calculi. He believed them to be "normal" and not the cause of my prostatitis. I am currently getting 3x per week massage but if that doesn't work, I will pursue Allopurinol trial. Although I experience some pain, my primary symptoms are burning, difficulty initiating and urinary frequency.

I was diagnosed with chronic prostatitis 5 years ago. I am now 39. One day a month I get gravel in my urine or in my semen. I spoke and saw many doctors. They all said it was normal and not to be concerned at all. They all said it was part of the condition. They said it was from stones(Calcifications) in my prostate and some doctors called it " pieces that chip off". Some also said I was lucky the stones break up. This might be because I take magnesium everyday. Does anyone else have this?

From: "David L. Casey, MD (back to top)
therapy for disintegrating these stones?

Let me comment: Prostatic stones differ greatly from let's say kidney stones in that they exist surrounded by solid tissue. Stones in the kidney, for instance are not surrounded by tissue, but instead are surrounded by fluid (urine). The lithotripsy used to treat kidney stones fragments these stones into small particles that can then pass down the ureter and out of the body. If one were to be able to fragment stones in the prostate with a form of lithotripsy, they could not disperse and pass through any fluid media to exit the body, the fragments would just sit there and likely reconglomerate into stones once again. Kidney stones that occur in areas that are poorly drained (such as caliceal diverticula outpocketings of the collecting systems of the kidney) aren't treated very well with lithotripsy for just this reason. One can fragment them, but since there is no drainage, they don't clear, and have a great chance of reforming into solid stones. Usually these stones have to be removed percutaneously under direct vision. Prostate stones would need to be extracted via a transurethral procedure such as a TURP to be effectively removed, and I'm not sure this is a great idea in many men with CP. I hope this clears the air a bit about prostatic calculi. Best of luck.

I agree. I have had cp for 1.5 yrs now and with proper diet and laying off of the junk that causes flare ups the only thing standing in the way of a total cure for me is calculi in the prostate. there is one single spot on the left lobe that has a large calcium deposit as seen in an ultrasound. I can feel where the pain originates and my wife
and doc verify that there is in fact a small area (about the size of a small pea) that stays (like a zit) on my prostate, even when the rest of my prostate is down and nonflared. If the docs could just get the damn calculi out I feel my battle would be 90% won. But I guess it won't be in my lifetime.

From: Bob:

I was told by my urologist last year I had Calculi. This showed up in my ultrasound. He did not seem to think it was serious. He said it was quite common. I continue to have off and on pain in my penis. I am wondering if part of the problem could be from the stones?

From: Pete

My urologist also told me after an ultrasound and biopsy that he saw two stones. the biopsy was negative for cancer. but those stones somehow must relate to a sharp pain in my groin from time to time. My flow is ok. PSA 5.6, it used to be 1.0 which is why I went to uro. It would seem that those stones are the cause for some, it not all, of our problems. I'm not sure that this qualifies as prostatitis or not? We need some solutions to removing those stone noninvasively.

In article (name withheld) wrote: (back to top)
> Just had my ultrasound and the radiologist said I had calcifications in
> my prostate. I've read that some people take a magnesium/zinc
supplement to clean out the stones. Does this actually work? And if so
what is the recommended daily dose rate of magnesium and how much
zinc must I take to balance out the side effects of the magnesium?
Also what else can I do to clean out the calcification?
Thanks in advance.

Because prostate calcifications are actually inspissated prostatic secretions rather than stones formed by a precipitating solute, there is NO dietary change and NO dietary supplement that will have any effect on the stones. Many asymptomatic men with no history of infections or prostatitis have prostatic calcifications.

Daniel Shoskes MD Cleveland Clinic Florida

This information is forwarded to you by the Prostatitis Foundation. We do not provide medical advice. We distribute literature and information relevant to prostatitis. While we encourage all research we do not endorse any doctor, medicine or treatment protocol. Consult with your own physician.

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