PRIAPISM – Ischemic or non-ischemic – Important to Know the Difference)

Compiled by Michael Holland – Prostate Cancer Advocate/Mentor
(With **hi-lighted** notes by Charles (Chuck) Maack – also PC Advocate/Mentor)

The discussion below requires a disclaimer so that readers recognize that the information is no more than a brief explanation of recognizing when actual ischemic priapism is present versus normal, but longer remaining erection (aka non-ischemic priapism).

DISCLAIMER: Please recognize that neither Michael Holland nor Charles Maack are Medical Doctors. Both have been avid students researching and studying prostate cancer as survivors for many years. Charles Maack remarks: "I have dedicated my retirement years to continued research and study in order to serve as an advocate for prostate cancer awareness, and, from a activist patient's viewpoint, to voluntarily help patients, caregivers, and others interested develop an understanding of prostate cancer, its treatment options, and the treatment of the side effects that often accompany treatment. There is absolutely no charge for my mentoring – I provide this free service as one who has been there and hoping to make your journey one with better understanding and knowledge than was available to me when I was diagnosed so many years ago. Readers of this paper must understand that the comments or recommendations made are not intended to be the procedure to blindly follow; rather, they are to be reviewed as personal opinion, then used for further personal research, study, and subsequent discussion with the medical professional/physician providing your prostate cancer care."

Ischemic Priapism: (veno-occlusive, low flow) priapism is a nonsexual, persistent erection characterized by little or no cavernous blood flow and abnormal cavernous blood gases (hypoxic, hypercarbic, and acidotic). The corpora cavernosa are rigid and tender to palpation. Patients typically report pain. A variety of etiologic factors may contribute to the failure of the detumescence mechanism in this condition. Ischemic priapism is an emergency.

Non-ischemic Priapism: (arterial, high flow) priapism is a nonsexual, persistent erection caused by unregulated cavernous arterial inflow. Cavernous blood gases are not hypoxic or acidotic. Typically the penis is neither fully rigid nor painful. Antecedent trauma is the most commonly

described etiology. Nonischemic priapism does not require emergent treatment.

Michael Holland:

I don't know anyone who has experienced true priapism. I have probably worked with a couple of hundred guys as patient advocate, if you will.

Both my doc at MGH and the BU clinic said that priapism is a rare response to injections, unless the patient has certain blood disorders, like sickle cell anemia, that cause the blood to thicken dramatically in the corpus cavernosa in response to the vasoactive drugs.

Otherwise, many patients DO HAVE PERSISTENT ERECTIONS, sometimes for several hours, but these erections do not present as ischemic priapism. They are just normal erections that persist, and are safe. The erection might be quite firm or hard but will be more warm and pink than purple/blue and cold, indicating circulation, will bend at least slightly, and are not painful in the sense of ischemic priapism, though they may have discomfort from Alprostadil. **(My Note: This observation of not painful, warm, pink – not purple/blue or cold – is important to keep in mind should you experience an erection that has not subsided by three to four hours, since it indicates a normal function unlikely to be ischemic priapism)**

There ARE a few guys that are VERY sensitive to the meds. But if you start guys at a conservative dose, like 5 mcg Alprostadil or 20 units of trimix 30/1/10, you will identify these guys early. They might get in trouble with an initial 20 mcg dose of Alprostadil, but that is way too high to start with.

My personal experience is that guys starting injection therapy frequently have erections that persist, for 3 hours or more, but after a few months they usually lose full rigidity in the 60 to 90 minute range.

My doc at MGH said that he figures almost all of the guys who show up at the ER for Priapism after injecting, have safe persistent erections, but get treated anyway, since most ER's never see this, sometimes with damage to the penis.

Since most docs and patient instructions tell the patient "go to the ER if the erection persists for more than 3 hours", but DON'T tell how to recognize priapism, most of them go with just a persistent, partial erection.
And the ER is the ER, they like to DO SOMETHING, so they do.

I find this AUA treatise on Priapism to be very helpful. Ishemic priapism is what we want to avoid: http://tinyurl.com/py9oc5e . **(My Note: For anyone reading the information herein, take the important time to read this referenced paper for the actual AUA explanation)**

It would be really helpful if our doctors could provide more useful advice.

My doc told me that if you have true priapism that is dangerous - you will most likely also have a blood disorder such as sickle cell anemia, and hopefully would know that in advance. You would know right away you were in trouble. The extreme erection usually is apparent from the get-go.

The erection will likely be really hard, like a wooden stick, unbendable. Harder than ANY erection you EVER had, even as a teenager. It will be blue/purple, very cool or cold - it will be apparent that there is no blood circulation. It will be very painful, but a "normal extended erection" for guys who have had RP may be painful due to the normal response to Alprostadil in the injection, so pain itself is not a clear indicator. **(My Note: Here, again, is the visual that may be identifying ischemic priapism – very hard erection, discolored to blue/purple, cool/cold to the touch)**

Your erection might be quite hard or firm, but if it is more warm and pink than blue and cold and you can give it a slight bend, wait it out.

When you are new to injecting and still have an erection after 5 hours, it can be scary, but as long as there is some evidence of circulation, wait it out. Read a book, take a walk, take Sudafed if you want. Take a hot soak if it feels good. DO NOT apply ice; this will thicken the blood more and make it worse. Heat will thin the blood. **(My Note: I see it important to make a personal decision in taking note of my foregoing, hi-lighted, notes at no later than four hours as to whether you conclude you are experiencing what appears more as ischemic priapism that should require a trip to the ER. If you have reviewed this paper this far, you have at least enough information to be able to discuss with ER physicians whether what they can visualize appears more ischemic rather than non-**

ischemic priapism, and whether withdrawing blood from the penis to reduce tumescence is necessary)

Don't expect the ER to make the right call. They almost never see this. They probably don't have the AUA article mentioned above. They will probably try to treat you, no matter what, and that might include draining blood from the penis with a large bore needle.

I have probably "talked down" about 20 guys from going to the ER.
One guy was still too nervous and went anyway. Later he told me: "...by the time they got to me I was only half erect, but they still used a large bore needle to withdraw blood from my penis."

He subsequently could not continue injection therapy for 8 weeks due to the damage.

Be sure to be aware of the difference between what is more likely a normal erection response rather than priapism.

(**Added note by Charles (Chuck) Maack** – Prostate Cancer Advocate/Mentor: I just read a paper regarding the expense of a trip to the Emergency Room when men become alarmed because of an erection that won't subside, and the expense escalates more for men with sickle cell anemia because of likely overnight or beyond admission to the hospital; see: **http://tinyurl.com/8k5crrm.** It would appear important that men intending penile injections with bimix/trimix first be tested by their physician to rule out the possible unknown presence of sickle cell anemia. In any case, when initially embarking on penile injections, start with low dosage, then increase as necessary.)