Priapism

WHAT IS PRIAPISM?

Priapism is a rare condition involving an erection that lasts for an unusually long time. It can be painful. This type of erection is not related to sexual stimulus. Immediate treatment is important to prevent tissue damage and erectile dysfunction (ED).

There are two types of priapism:

• **Ischemic priapism**: when blood cannot leave the penis. This erection can last for more than four (4) hours. The penis shaft may be very hard, while the tip is soft. It is known to cause pain and discomfort. This type may stop and start (stuttering priapism).

• **Nonischemic priapism**: when too much blood flows into the penis. This is a less painful erection, but it can also last for more than four (4) hours. The penis shaft is erect but not rigid.

Priapism can happen in young boys (age 5-10), young adults (around age 20) and mature men (over age 50).

HOW DO ERECTIONS WORK?

When you are not sexually aroused, your penis is soft and limp. During sexual arousal, nerve messages release chemicals that increase blood flow into the penis. The blood flows into two erection chambers made of spongy tissue (the corpus cavernosum) in the penis. The “smooth muscle” in the erection chambers relaxes, which lets blood enter and stay in the chambers. The pressure of the blood in the chambers makes the penis firm, giving you an erection. After you have an orgasm, the blood flows out of the chambers and the erection goes away.

WHAT CAUSES A LONG-TERM AND PAINFUL ERECTION?

Normally, a penis becomes erect when an emotional or physical stimulus increases blood flow to the area. More blood in the penis causes blood vessels and nerves to respond as an erection. Priapism happens when blood flow
to the penis doesn’t work correctly. Some things that could cause this are:

• Blood disorders, like sickle cell anemia and leukemia
• Prescription drugs, like some ED drugs, e.g. Sildenafil (Viagra), Tadalafil (Cialis), Vardenafil (Levitra), mental health drugs, e.g. Fluoxetine (Prozac), Bupropion (Wellbutrin), Risperidone (Risperdal) and Olanzapine (Zyprexa) and blood thinners, e.g. Warfarin (Coumadin) and heparin
• Alcohol and drug use
• Injury to your genitals, pelvis or the area between the penis and the anus; or to the spinal cord
• Tumors

To learn why you are having priapism, and which type, talk to your health care provider. He or she will ask questions and examine your genitals, abdomen, groin and perineum. Your doctor will want to learn your symptoms, and if you’ve had an injury. Blood tests, blood gas measurements and a blood flow ultrasound may be used to help diagnose the cause.

WHY IS TREATMENT IMPORTANT?

When an erection lasts for too long, blood becomes trapped in the penis. The blood trapped in the penis is unable to go to other parts of the body. A function of blood is to carry oxygen to your body. When the blood is trapped, it means oxygen is trapped as well. This means other parts of your penis and body are not receiving oxygen from the trapped blood. The lack of oxygen can damage or destroy tissue in the penis. This can disfigure the penis. It may also cause problems like erectile dysfunction (when the penis cannot become erect).

WHAT TREATS PRIAPISM?

Ischemic priapism calls for emergency care. Blood must be drained from the penis. There are several ways to do this:

• Aspiration (when a surgical needle and syringe is used) to drain excess blood
• Medicine or a saline mix may be injected into penile veins to improve blood flow. The veins are flushed to relieve pain, remove oxygen-poor blood and stop the erection
• A surgeon may perform a “shunt” to vent blood from the penis

In addition, if you have sickle cell anemia, you will need treatment for that disease. If you have damage to the area from an injury, surgery to repair arteries or tissue could be helpful. If you have stuttering priapism, your doctor will want to prevent future events.

Nonischemic priapism often goes away without treatment. Simple ice and pressure on the perineum may help end the erection. A watch and wait approach is used before surgery.

QUESTIONS TO ASK YOUR HEALTH CARE PROVIDER

Tell your health care provider about any medicine you use. Also, talk about your symptoms and health history. You likely have questions, and you should ask them. For example:

• What type of priapism do I have?
• What is causing these erections?
• What tests will help you diagnose the cause?
• What can I do to prevent this problem in the future?
• What can I do to protect myself from erectile dysfunction?
• Are there medicines or activities that I should avoid?

RESOURCES

American Urological Association
Priapism Clinical Guideline
http://www.AUANet.org/education/guidelines/priapism.cfm

Erectile Dysfunction Clinical Guideline
https://www.AUANet.org/education/guidelines/erectile-dysfunction.cfm

Sexual Medicine Society of North America
http://www.smsna.org/V1/index.php

SexHealthMatters
http://www.sexhealthmatters.org/home

Urology Care Foundation
You may download this fact sheet and print it yourself at UrologyHealth.org/Priapism.

For copies of printed materials about priapism and other urologic conditions, visit UrologyHealth.org/Order or call 800-828-7866.