

Meatal stenosis

Definition

Meatal stenosis is a narrowing of the opening of the urethra, the tube through which urine leaves the body.

Alternative Names

Urethral meatal stenosis

Causes, incidence, and risk factors

Meatal stenosis can affect both males and females, but it is more common in males. In males, it is often caused by swelling and irritation (inflammation) after a newborn is circumcised. This leads to abnormal tissue growth and scarring across the opening of the urethra. The problem is usually not found until the child is toilet trained. In females, this condition is present at birth (congenital). Although less common, meatal stenosis may also affect adult women.

Risks include:

- Having multiple endoscopic procedures (cystoscopy)
- Severe, long-term atrophic vaginitis

Symptoms

- Abnormal strength and direction of urine stream
- Bed wetting
- Bleeding (hematuria) at end of urination
- Discomfort with urination
- Incontinence (day or night)
- Visible narrow opening in boys

Signs and tests

In boys, a history and physical exam are enough to make the diagnosis. In girls, a voiding cystourethrogram may be done. The narrowing may also be found during a physical exam, or when a health care provider tries to place a Foley catheter.

Other tests may include:

- Complete blood count (CBC)
- Kidney and bladder ultrasound
- Urine analysis
- Urine culture

Treatment

In females, meatal stenosis can usually be treated in the health care provider's office. This is done using local anesthesia to numb the area. Then the opening of the urethra is widened (dilated) with special instruments.

In boys, a minor outpatient surgery called meatoplasty is the treatment of choice.

Expectations (prognosis)

Most people will urinate normally after treatment.

Complications

- Abnormal urine stream
- Blood in the urine
- Frequent urination
- Painful urination
- Urinary incontinence
- Urinary tract infections

Calling your health care provider

Call for an appointment with your health care provider if your child has symptoms of this disorder.

Prevention

If your baby boy has recently been circumcised, try to keep the diaper clean and dry. Avoid exposing the newly circumcised penis to any irritants.