



Meatal stenosis

What is it?

Meatal stenosis is a narrowing of the opening of the urethra, at the tip of the penis.

It most commonly occurs months to years after circumcision, from chronic abrasion of the exposed meatus and glans. Meatal stenosis may also occur after hypospadias repair or other urethral surgery.

How does it present?

Boys may have:

- difficulty voiding or straining
- frequency of urination
- prolonged urinary stream
- spraying of the urinary stream
- painful urination
- recurrent urinary tract infections

What tests are performed?

Physical examination can visualise a narrowing of the meatus, but not assess how much it restricts flow.

Bladder ultrasound can assess impairment of bladder emptying

Uroflowmetry, involving boy voiding into special toilet that can assess strength and duration of stream, may also be useful

What problems may be caused?

If bladder emptying is impaired, urinary tract infection may occur

If voiding occurs at high pressure, the kidneys can be threatened by back-pressure.

What are the treatment options?

Treatment is surgical. The operation involves opening up the meatus – a procedure called ‘meatotomy’ or ‘meatoplasty’.

This is usually performed under general anaesthesia, with a cut being made into the scar tissue to open up the narrowed urethra. Sutures may be placed in the skin edges.

Following the procedure, you may be given some ointment to apply to the penis.

What are the complications?

Bleeding and infection are the most common complications of all operations, but fortunately uncommon in this surgery. Occasional spotting of blood is common, though.

Some stinging when voiding is expected for a few days after surgery.

Narrowing can re-occur after surgery, due to new scarring.

What are the outcomes?

Most children will have a good result from the surgery, with improvement of their symptoms.

Meatal stenosis can reoccur after healing. If symptoms recur, you need to see a doctor again.

What is the follow-up?

Your child will need to see the surgical team 4-6 weeks after surgery, to assess healing, and reduction of symptoms. If the symptoms recur or there are any complications, please tell your doctor.