PROCEDURE

Hypospadias repair

Hypospadias repair is surgery to reposition the urine opening and correct associated penile curvature.

PURPOSE
Create a straighter penis with a more typical urine opening

PROCEDURE TYPE
Therapeutic, surgical

WHERE IT IS DONE
Operating theatre, usually as day surgery

ANAESTHESIA
General anaesthesia

HOW LONG IT TAKES
One to three hours for many single-stage repairs

PREPARATION
Fasting, medication review, and skin health check

RECOVERY
Same day or overnight; adults cannot drive after anaesthesia

MAIN RISKS
Fistula, narrowing, wound breakdown, infection

RESULTS
Early result immediate; final healing assessed over months

Overview

Hypospadias repair is an operation on the penis. It is most often performed during childhood, although teenagers and adults can also have it.

The surgeon creates a new section of urethra, the tube that carries urine out of the body. This moves the urine opening closer to the tip of the penis. The surgeon may also straighten downward curvature, called chordee, and reshape the head and skin of the penis.

Some repairs are completed in one operation. More complex repairs may be planned in two or more stages.

Why the procedure is performed

The goals are different for each person. Surgery may be offered to:

A mild difference near the tip may cause few practical problems. In that situation, the possible functional and appearance benefits should be weighed against the risks of surgery.

- Produce a more controlled, forward urine stream
- Make standing to urinate easier
- Straighten significant curvature
- Support future sexual function
- Reconstruct the head and skin of the penis

Who should and should not have it

Repair may be suitable when the urine opening is well below the tip, the penis has significant curvature, or the urine stream is difficult to direct. Many centres perform childhood repair between 6 and 18 months of age, but timing is individualized.

Surgery may be optional for mild hypospadias without curvature or problems passing urine. Observation allows surgery to be avoided, but the opening and appearance will remain unchanged.

An operation is usually delayed if there is an active infection, significant diaper rash, broken skin near the surgical area, or an illness that makes anaesthesia less safe. Any bleeding disorder or medicine that affects clotting must be reviewed first.

Hypospadias combined with one or both testicles not being in the scrotum may require additional assessment before surgery. This helps the team understand genital development and plan appropriate care.

Do not arrange circumcision before a pediatric urology assessment. Foreskin tissue is sometimes useful during reconstruction, although it is not required for every technique.

How to prepare

Your treating facility's own instructions take priority because fasting rules, medication plans, and arrival times differ.

Tell the surgical team about medicines, vitamins, allergies, bleeding problems, previous operations, and reactions to anaesthesia. Do not stop a prescribed blood thinner like warfarin

or apixaban unless the treating team gives specific instructions.

General anaesthesia requires a period without food. Clear-liquid rules may be different from food and milk rules, so follow the exact times provided. If fasting instructions are not followed, the operation may need to be postponed for safety.

Tell the facility about fever, cough, vomiting, diarrhea, a new rash, or infection before the operation. Bathe as instructed, but do not apply creams or powders to the surgical area unless requested.

Arrange transport home and an adult to provide care afterward. Bring loose clothing and any supplies the facility recommends for catheter or diaper care.

What happens during the procedure

After general anaesthesia begins, your child or you will be asleep and will not feel the operation. The surgeon examines the penis and checks the degree of curvature.

The exact repair is based on the opening's location, the condition of the existing urethral tissue, and the amount of curvature. The surgeon may:

A soft catheter or stent is often left in the new channel while it heals. It may drain into a diaper or collection bag. A dressing may cover the penis.

For severe hypospadias, the first operation may straighten the penis and place healthy graft tissue. A later operation forms the new urethra.

- Release tissue causing curvature
- Form a new urine channel from nearby skin or a graft
- Move the opening toward the tip
- Reconstruct the head of the penis
- Repair or reshape the foreskin and penile skin

Recovery and what to expect afterward

Pain: Soreness, swelling, and bruising are expected. Bladder spasms can cause brief cramping or the urge to urinate while a catheter is present. Use only the pain and bladder medicines recommended by the treating team.

Eating: Start with fluids and light food if there is nausea from anaesthesia. A usual diet can generally resume as tolerated. Fluids and fibre can help prevent constipation and straining.

Activity: Quiet play and gentle walking are usually encouraged. Avoid bicycles, straddle toys, rough play, sports, swimming, and other activities that press on the penis until the surgeon says they are safe. Follow the facility's instructions about bathing and dressing removal.

Driving: A caregiver must drive a child home. An adult who has had general anaesthesia must not drive until the facility's restriction has passed and pain, medicines, and any catheter no longer make driving unsafe.

Work, school, or daycare: Time away is based on comfort, catheter use, and the type of activity involved. The surgical team will give a return date and any activity restrictions.

Some swelling and a small amount of spotting may occur. The penis can look uneven during early healing. Do not remove the catheter or dressing unless instructed. Make sure the catheter is not bent or pulled.

Risks and possible complications

The risks are influenced by the location of the original opening, the amount of curvature, previous operations, and the repair technique. More complex and repeat repairs generally have a greater chance of further surgery.

Possible complications include:

Some problems become clear only as the penis grows. A complication does not always require immediate surgery; the surgeon may wait for swelling to settle before deciding on treatment.

- Bleeding, infection, or problems related to anaesthesia
- A urethrocutaneous fistula, meaning a second opening that leaks urine
- Narrowing of the new opening or urethra
- Partial separation of the repair or reconstructed head
- Remaining or recurrent curvature
- Scarring, an uneven urine stream, or dissatisfaction with appearance
- A widened area of urethra where urine collects

Results and follow up

The surgeon can explain what was completed soon after the operation. The early appearance is not the final result because swelling and scar tissue change over several months.

Routine follow-up checks the wound, removes the catheter if needed, and assesses healing

and the urine stream. Keep these appointments even if recovery appears straightforward.

Further review may be advised later in childhood or around puberty, especially after a proximal, staged, or repeat repair. Contact the team between routine visits if the stream becomes thin, spraying worsens, the penis curves during erections, or urine leaks from a second opening.

Alternatives

Observation is a reasonable option for some mild cases without significant curvature or urinary difficulty. It avoids anaesthesia and surgical complications, but it does not change the opening, urine stream, or appearance.

Deferring surgery allows more time to consider the decision or address another health issue. However, the current anatomy remains, and recovery from later surgery may interfere more with school, work, or personal awareness.

A limited procedure , such as reshaping or widening an opening near the tip, may suit selected cases. It is less extensive but does not correct every type of curvature or missing urethral segment.

Staged reconstruction is an alternative to a one-stage repair for complex cases. It requires more than one anaesthetic and recovery period, but it can provide healthier tissue for later urethral reconstruction.

No medicine can permanently move the urine opening. A second opinion from a reconstructive or pediatric urologist can help when the proposed repair is complex.

When to call your healthcare team

Contact the surgical team promptly for increasing redness or swelling, pus, worsening pain, persistent vomiting, fever at or above the threshold in your discharge instructions, or a dressing problem.

Call promptly if the catheter falls out, stops draining, becomes difficult to flush when flushing was specifically taught, or appears to be causing marked discomfort. A little urine around a catheter can occur, but the team should assess a major change.

Seek emergency care for:

For non-urgent concerns about the stream, appearance, erections, or toilet training, arrange a routine follow-up rather than using emergency services.

- Trouble breathing or unusual difficulty waking after anaesthesia
- Heavy bleeding that does not stop
- Severe pain with no urine draining
- Rapidly worsening swelling or major discoloration
- Signs of a severe allergic reaction

Common questions

Will my child be asleep?

Yes. Hypospadias repair is usually performed under general anaesthesia. Some anaesthesia teams also use a regional nerve block to reduce pain after surgery.

Can we drive home afterward?

A responsible adult must drive. Many children go home the same day, but an overnight stay may be recommended after a complex repair or if closer observation is needed.

How painful is it?

Soreness is expected, particularly during the first few days. Swelling, catheter irritation, and bladder spasms can add discomfort. The team will provide a pain-control plan suited to the operation.

When will we know if it worked?

The surgeon can describe the repair immediately. Healing, appearance, and urine flow are assessed over weeks to months. Some complications do not become apparent until later growth.

Will there be a catheter?

A catheter or stent is common, but not universal. How long it stays in place is based on the repair. The discharge instructions should explain drainage, bathing, and what to do if it moves.

Will the penis look circumcised afterward?

Many repairs leave a circumcised appearance because foreskin tissue is used or removed. Foreskin reconstruction may be possible in selected cases. Discuss the expected appearance before giving consent.

Sources



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