Name of Operation: Ureteric re-implantation for reflux (re-plumbing into the bladder the bottom part of the ureter [urine-tube from the kidney to bladder]).

Main issues:

- Where the ureter (the tube that carries urine from the kidney) drains into the bladder, there is normally a one-way “valve.” If this valve is “loose,” it can cause kidney-reflux (urine going the wrong way up to the kidney). This can lead to several problems.

- A loose valve may improve on its own in early childhood. If not, there is unfortunately no medication to cure this problem. However, the valve can be “tightened” by injecting around it with a “bulking agent” called Deflux® (STING procedure), or by re-plumbing it during open surgery (ureteric reimplantation).

- Wound across the lower tummy, hidden by underwear:
  - Dissolving stitches.
  - A bladder drainage-tube (“catheter”) is needed for several days.
  - Sometimes also 1-2 small drainage-tubes (“stents”) in the ureter(s) for several days.
  - Urine quite blood-stained for first few days (usually settles if your child drinks plenty).
  - Bladder-spasms, which usually settle with medication.

- Sore to pee for a few days after the catheter is removed.

- Likely post-operative schedule and recovery-time.

Intended benefits:

- To tighten up the “valve,” to stop or reduce the amount of reflux of urine to kidney(s).

- This should reduce (but may not completely get rid of) the risk of serious urine infections or kidney stones, and may help the bladder to work better.

- However, research suggests that this operation will not reduce the risk of future damage to the kidneys any better than preventative antibiotics.

- Unfortunately, this operation will also not reverse any previous damage to the kidneys.
**Common or serious risks:**

- Overall success-rate for preventing reflux of about 90% (9 out of 10).

- Bleeding (rarely serious, but occasionally a blood transfusion is needed). If blood appears in the urine a week or so later, a urine sample should be checked for infection via your family-doctor.

- Infection: usually prevented by the antibiotics given in hospital, and by drinking plenty afterwards, and by the preventative antibiotics your child is already on. If you are worried later at home, a urine sample should be checked for infection via your family-doctor or your local hospital. Sometimes such an infection can be quite serious.

- Damage to the water-pipe (urethra), bladder, ureters, kidneys, or bowel: unlikely to be serious, but occasionally further surgery may be needed.

- Damage to the sperm-tube in a boy: rare, and should not usually affect his future fertility.

- Early leak of urine from the bladder: usually settles with the catheter.

- Blockage of the ureter: rare, but further surgery may be needed.

- Continuing kidney-reflux in about 1 out of 10 children: sometimes this can lead to serious kidney infections and kidney damage. Further surgery may be needed later.

- On-going kidney damage, urine infections, or high blood-pressure, sometimes for other reasons despite a technically successful operation.

- Poor healing of the wound: unusual, but occasionally may need later surgery.

- Anaesthetic problems (rarely serious, but around 1 in 250,000 general anaesthetics in children can be fatal).

1. A diagram of normal waterworks
2. A diagram of a kidney and ureter stretched by reflux

3. A diagram showing the steps of a reimplantation of both ureters