Undescended Testes and Open Orchidopexy

What are undescended testicles?

Normally, the testes develop in the abdomen and move down into the scrotum before birth. In 1-3% in male babies, the testes do not come down completely to desired position and in these circumstances the most common site for the testes to be found is the groin (Undescended testes) or perineum or other areas (Ectopic testes). This condition is different from retractile testicles and management is different.

What are the symptoms and risks related to undescended testes?

Most of the undescended testes are asymptomatic and do not affect bodily function. They are usually picked up at postnatal and 6-week check. They are routinely diagnosed in outpatient clinics with simple clinical examination and operated on elective lists. In most cases no further investigations are needed. (Rarely, undescended testicles can twist and can cause pain. In such instances, besides pain there will be obvious swelling and redness in the groin and scrotal area. You need to seek urgent advice if this happens.)

If no intervention takes place, the undescended testes may not develop/mature normally at puberty and there is a high risk of the testes not working effectively (not producing sperm or hormones properly). The testis could also become twisted (testicular torsion) which can be painful and cause the testis to die off if left in the groin. The operation makes self-examination of the testes easier, as they are at a higher risk of developing cancer in future.

What is an Orchidopexy?

An orchidopexy is an operation that is performed when your child's testicles are not in their usual place in the scrotum. Preferred timing for surgery is between 12-24 months of age.

Before the operation

A surgical member of the staff will explain the procedure and rationale in detail. You will be asked to give permission for the procedure by signing a consent form after addressing your questions/ concerns. Your child's name will be listed for the procedure. The Day procedure Unit will contact you with date for surgery and pre-operative assessment. At preoperative assessment (either clinic or telephone appointment), checks will take place to make sure your child is well for the procedure.

On Day of procedure

A letter detailing instructions will be provided. Your child should not have anything to eat or drink from the times specified in the letter. It is important that you follow the instructions otherwise the procedure may be delayed or cancelled.

The Surgeon and anaesthetist will again review your child on day of the surgery and confirm the consent. The site for surgery will be marked and you will know approximately what time your child is likely to go to theatre.

The Operation itself

The operation is performed under general anaesthetic as day cases and usually takes 60-90 minutes. It involves one incision in the groin and another in the scrotum. In appropriate cases, it may be done through a single scrotal incision. If the testes are not palpable, a laparoscopy (camera through the belly button) may be required. You will be explained the likelihood of this before the operation. Occasionally two operations performed in stages may be required to bring the testis down.

Through the incision in the groin the testicle is found and freed up so the cord is long enough for it to come down into the scrotum. The testicle is brought down and fixed into the scrotum. Local anaesthetic is injected to the site during the operation for pain relief.

The sutures used in the groin and the scrotum are dissolvable, these may take 8-10 weeks to dissolve fully.

On Rare occasions, if the surgeon finds that the testis hasn't developed properly, the risk of keeping it in place outweighs the benefits. In such cases it may be necessary to remove the rudimentary testicle. In such cases Surgeons may consider securing the other normal testicle so that it remains in place and can develop in normal way.

What are the risks associated with operation?

Possible risks and complications for orchidopexy include:

- General Anaesthesia: For risks related to general anaesthesia (see General Anaesthesia leaflet). Your anaesthetist is usually a paediatric anaesthetist experienced in dealing with children. They will explain the risk during pre-operative discussion
- Infection: (1-2% risk). The risk is low, and no routine peri-operative antibiotics are prescribed.
- Bleeding or blood clots in the scrotum (1% risk). There are no major blood vessels in the areas and chances of damage to major vessels are minimal.
- Damage to the blood supply to the testis or the vas deferens (tube leading from the testis) (1-2% risk)
- The testes moving out of the scrotum again after surgery (1-2% risk). This may need repeat surgery.
- Testicular atrophy (Testis shrinking in size) (1-3% risk).
- Need for repeat Surgery (1-4%)

The child will have a post-operative assessment to check if the success of the surgery. Most of the complications are minor and easily sorted with conservative management. Some problems may need repeat surgery.

What to expect after operation?

You will be able to see the child once he comes back to recovery. He will be brought back to the ward and allowed to eat and drink. Once he is eating and drinking well, not in pain and local operative area is satisfactory he will be allowed to go home. This usually happens in 2-4 hours after surgery. We will perform a telephone check to make sure things are fine on following day if needed.

The area will be sore and may be swollen and bruised for a couple of days after surgery. After the local anaesthetic wears off in 6-8 hours your child may experience more pain. You will be advised by the anaesthetist about what pain relief your child can take. It is advisable to provide pain relief like paracetamol +/- ibuprofen regularly for at least 48-72 hours. He will probably be more comfortable in loose fitting clothing i.e., pyjamas or tracksuit. As well as medicines, distracting your child by playing games, watching TV or reading together can also help to keep your child's mind off the pain. It is better to keep your child mobile and active if pain permits. Most children will start getting back to normal activity within 24-48 hours after surgery. Avoid riding bikes or sit on toys more 4-6 weeks since the scrotal area may still be sore.

You should keep the operation site clean and dry for the first 3 days. After 3 days he may go into the bath, the dressing may be taken off at this time. The steri-strips or glue should start flaking away by this time and can be safely removed.

If your child is feeling comfortable, he can return to school in 3-4 days after surgery. You will be given an appointment in the surgical clinic for review in 8-12 weeks.

What are long term outcomes after orchidopexy?

When testes are treated in early childhood, the outlook is good. The testicle may remain on smaller sides, but normal fertility and hormone production can be expected. If a damaged testicle is removed, this should not affect your child's fertility levels in later life to any great degree.

Useful contacts for further information
If you have any queries prior to the procedure outlined and its implications to you or your relatives/carers, please contact the Day Procedure unit on **01603 286008.**

If you should need any help or advice during the first 24 hours following your child's surgery you are advised to contact the on call Paediatric surgeon, the contact details of which will be given on your child's discharge letter. For advice following this time, please contact your child's GP.

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