

Paediatric appendicectomy - information for parents and carers

What is appendicitis?

The appendix is a small tubular structure attached to the colon (bowel) which sits in the right lower part of the abdomen. The appendix has no particular function that we know of at present.

The appendix can become inflamed which results in acute appendicitis.



Appendicitis can affect children of any age. Children can have abdominal pain, vomiting, a temperature, diarrhoea, decreased energy, loss of appetite and sometimes pain on passing urine.

If your child has acute appendicitis we will recommend treatment with an operation to remove the appendix and intravenous antibiotics. Without this treatment your child will not improve and will become more unwell.

How is it treated?

All children with suspected acute appendicitis are admitted to hospital for observation and to ensure they receive good pain relief. An intravenous drip, given through a small tube in the hand or arm, is given to ensure your child does not become dehydrated and antibiotics are given intravenously once the doctor has confirmed the diagnosis.

Acute appendicitis is treated by removal of the appendix and any related infection from within the abdominal cavity.

What are the benefits of surgery?

The surgery allows the inflamed appendix to be removed. We also remove any associated infection that has developed around the inflamed appendix. This should prevent any deterioration, and allow your child to make a good recovery.

Are there any alternatives?

In some situations we may recommend to treat your child with antibiotics only and close observation. This is more likely if your child has been unwell for a longer period of time and has developed an 'appendix mass.' If this is the case then your doctor will explain this to you in more detail. Sometimes we then remove the appendix at a later date after the inflammation has settled down.

What does the operation involve?

The operation is carried out under general anaesthetic; your child will be asleep during the operation.

We aim to do the operation, appendicectomy, using the laparoscopic (key-hole) technique. This involves a small cut underneath the belly button and two smaller cuts (<1cm) lower down on the tummy. The appendix is removed, any related infection is washed out and we ensure that there is no other obvious abnormality within the abdomen.

Occasionally, it is not possible to do the operation with the laparoscopic technique. In this case we do the same operation but through a larger cut in the right lower part of the abdomen.

The cuts in the skin will be closed using dissolving stitches, with glue or paper stitches on top. After the operation there is usually no need for any of the stitches to be removed.

What preparation is needed?

Your child will be seen by the anaesthetic doctor before the operation. The anaesthetic doctor will explain to you the process of having an anaesthetic ('going off to sleep') and answer your questions. The surgeon will explain the procedure to you and ask for your verbal and written consent to go ahead. The surgeon will answer any questions you have regarding the operation itself and anticipated recovery time.

What happens on the day of the procedure?

The anaesthetic and surgical doctors will see you as outlined above. The nursing staff will complete a check-list with you before your child goes for their operation. We will also advise you as to when your child should stop having any food or drinks in anticipation of having the anaesthetic and operation.

We will aim to do your child's procedure at the earliest and safest opportunity. On rare occasions there may be a delay due to more urgent cases and we will do our best to keep you updated.

Please follow the fasting instructions given to you by staff.

When can my child resume activities?

Your child can resume normal activities as soon as they feel able. They will restrict their own activity if they suffer any discomfort. We find that children can seem very tired when they get home from hospital and will need to have the opportunity to rest. Our usual advice is that it is safe to resume gentle exercise 2-3 weeks after the operation and be back to full physical activities by 6 weeks. It is important that you inform the school that your child has had an operation and plan your child's return to school with their teacher. Children who have had a straight forward case of acute appendicitis can return to school soon after the operation. Children who have had more severe acute appendicitis tend to need longer to recover. Your nursing and medical team will discuss this with you before you are discharged from hospital.

Are there any risks or complications?

As with all procedures, there are some risks from having this operation.

General risks

Anaesthetic complications: Every anaesthetic carries a risk of complications, but this is very small. Your child's anaesthetist is an experienced doctor who is trained to deal with any complication. The Royal College of Anaesthesia states that throughout the lifetime of an individual they are 100 times more likely to suffer serious injury or death from a traffic accident than from an anaesthetic. After an anaesthetic some children may feel sick and vomit. They may have a headache, sore throat or feel dizzy. These side effects are usually short-lived and not severe.

You will have the opportunity to speak to an anaesthetist before the operation.

Pain: This is usually minor, and can be managed with pain killers given by mouth or intravenously.

Bleeding: This is usually minor and is stopped during the operation. Very occasionally a patient may develop a collection of blood called a haematoma, which may require a second operation.

Infection: All surgery has a risk of infection. There is a small risk of wound infection. The wounds may become red, hot, swollen or weep, or your child may have a temperature and feel unwell. The treatment for this is good wound care and antibiotics. Some children can develop infection within the tummy after the operation. Your child will be observed closely for this whilst in hospital. If this develops then the treatment usually is a longer course of antibiotics.

Scarring: There will be a visible scar at the site of the incision. This is small and should heal well. Scars are initially red/pink in colour and fade to white after 4-6 months. Rarely a small lump may develop underneath the scar which may represent a wound hernia and require further attention.

Risks specific to Appendicectomy.

Injury to structures around the appendix: Damage to structures around the appendix at the time of the operation are rare. There is a very small risk that there is inadvertent damage to the bladder, bowel, ureter (tube from the kidney to the bladder), ovary and fallopian tube in girls or vas deferens in boys. If such injury occurs during the operation then it will be repaired and you will be informed at the earliest opportunity. Your surgeon is trained to deal with any such complications.

Abscess formation: As stated above infection can be a complication after appendicectomy. Infection may occur around the wounds or within the tummy. This may cause an abscess (infected collection) that may require prolonged antibiotics for treatment, or sometimes a further procedure to drain the infection (pus). A child can develop a chest or urine infection after appendicectomy but this is uncommon.

Adhesions: Scarring on the inside of the abdomen as a result of severe infection, or as a complication of difficult surgery may lead to adhesion (bands of scar tissue) that can cause a blockage to the intestines. This results in vomiting of intestinal contents (in particular green vomits), abdominal fullness (distension) and feeling unwell. If this complication happens your child may need time in hospital and a period of bowel rest to allow things to settle. However, sometimes an operation is required for adhesions.

Further Information

This information was produced using the latest evidence available. Further details are available upon request.

NHS Lothian Children's Services Consent Form for Appendicectomy	Addressograph, or
	Name:
	DOB
Unit No./CHI	

Please read the patient information leaflet 'Paediatric Appendicectomy v1.0' before you sign this consent form

Name of procedure: **Appendicectomy**

Open Laparoscopic (keyhole)

To the healthcare professional (to be filled in by health professional with appropriate knowledge of the proposed procedure, as specified in the Consent policy)

I have explained the procedure to the patient. In particular, I have explained:
The intended benefit To remove the inflamed appendix and any associated infection

Significant, unavoidable or frequently occurring risks:
 Bleeding; Infection; Conversion to open procedure; visceral injury; abscess formation; adhesions

Any extra procedure(s) which may become necessary during the procedure:

Clinical photography

Other procedure (please specify)

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I have also discussed the benefits and risks of any available alternative treatments (including no treatment) and any particular concerns of this patient.
 I have confirmed that the patient/parent understands what the procedure involves, including the benefits and any risks.
 I have confirmed that the patient/parent has no further questions and wishes the procedure to go ahead.

This procedure will involve: general and/or regional anaesthesia

Healthcare Professional's signature: Print name and job title:	Date:
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Statement of interpreter (where appropriate)

I have interpreted the information above to the patient/parent to the best of my ability and in a way in which I believe that she / he / they can understand.

Signature: Print name: Or, please note the telephone interpreter ID number:	Date:
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Statement of patient/Person with parental responsibility

Please read this form carefully. You have the right to change your mind at any time, including after you have signed this consent form.

I agree to the procedure or course of treatment described on this form (and I confirm I have Parental Responsibility for the child if applicable).

I understand that you cannot give me a guarantee that a particular person will perform the procedure. The person will, however, have appropriate experience.

I understand that I will have the opportunity to discuss the details of anaesthesia with an anaesthetist before the procedure, unless the urgency of the situation prevents this. (This only applies to patients having general or regional anaesthesia).

I understand that any procedure, in addition to those described on this consent form, will only be carried out if it is necessary to save my life or to prevent serious harm to my health.

I have been told about additional procedures, including the use of photography and video recording equipment, which may become necessary during my treatment. I have listed below any procedures **which I do not wish to be carried out:**

Patient's signature/Person with parental responsibility:

Date:

Print Name:

Relationship to child:

A witness should sign below if the patient is unable to sign, but has indicated his or her consent. Young people/children may also like a parent to sign here.

Witness' signature:

Date:

Print name:

Relationship:

Confirmation of Consent (to be completed by a health professional when the patient is admitted for the procedure, if the patient has signed the form in advance)

On behalf of the team treating the patient, I have confirmed with the patient that she / he has no further questions and wishes the procedure to go ahead.

Healthcare Professional's Signature:

Date:

Print name:

Job title: