Laparoscopic cholecystectomy – in children

What is a laparoscopic cholecystectomy?
This is an operation to remove the gall bladder using key-hole surgical techniques.

What is the gall bladder?
Your liver has many functions, one of which is to produce a substance called bile. Bile is a green liquid which drains from the liver into the intestine via the bile duct. The gall bladder is a small reservoir attached to the side of the bile duct where bile can be stored between meals. The gall bladder sits just under the liver which is in the right upper part of the abdomen, just under the ribs.

Bile has many functions, one of which is to allow us to absorb fat. When we eat, particularly fatty foods, the gall bladder contracts and empties extra bile into the bile duct. It is then emptied into the intestine to mix with the food.

Why does my child need to have their gall bladder removed?
It is necessary because either
1. There is poor function with related pain or
2. Pain is being experienced due to gall stones. These small stones form in the gall bladder and can cause a range of problems including pain and infection. Gall stones do not always cause symptoms and gall stones which are not causing trouble can usually be left alone.
Can you have a normal life without your gall bladder?
Yes. The gall bladder is a reservoir for bile and we are able to manage without it. Your child will be able to eat a normal diet. Occasionally patients notice that their stools (‘poo’) are a little looser than before the operation.

Preparation before admission for surgery
Before surgery takes place the following will occur:

1. Pre-operative assessment
   You will be asked to complete a ‘health screening questionnaire’ when your child is added to the waiting list; this will be completed immediately after your appointment if your child was seen in one of our clinics at Addenbrooke’s or, over the telephone if your child was reviewed in one of our outlying clinics.

2. Blood tests
   Blood tests will be required and these are taken within 4 weeks of the operation date.

Admission to hospital
You will be asked to bring your child to one of our children’s wards. For most children this will be early in the morning on the same day as the operation but occasionally, this may be one day prior to surgery if your child has an underlying condition which means they need monitoring before surgery. You will be met by nursing staff and seen by your doctors and anaesthetist. Whilst your child is in hospital you will be able to stay with your child overnight if you wish. You can also be present while your child goes to sleep for their operation, and in the recovery area where he/she wakes up.

The operation
The operation will be carried out under a general anaesthetic. Four small ‘key-holes’ (about 5mm long each) are made in the tummy wall. Through these holes, special instruments are used to free up the gall bladder and its stones from underneath the liver and remove it completely. This is all visualised on a television screen by a miniature camera which is inserted through one of the four key-holes.

After the operation
- You will be able to be with your child as soon as they begin to wake in the recovery room.
- Local anaesthetic will be used to stop pain from the four ‘key-holes’. However, some children experience some discomfort around their tummy muscles and shoulders from the gas that is used in laparoscopic surgery. This can be relieved with pain killers.
Children are able to drink and eat normally after their operations and most children are able to get out of bed within a few hours.

It will take seven to fourteen days for your child to recover at home; children should be able to return to school after two weeks.

**How is this operation different from the traditional one?**

The actual operation is the same. The only thing that is different is the way in which we get to the gall bladder to remove it. Traditionally, a small cut (10-15cms long) was made underneath the ribs. This takes longer to heal then the four little holes of key-hole surgery and the recovery is slower.

**Is there a guarantee that key-hole surgery can be done?**

No, it is not possible to guarantee that the operation can be completed by key-hole surgery. If there is some technical difficulty with removing the gall bladder (for example, it is difficult to visualise or remove) then a traditional cut will be needed to remove it. The stay in hospital will be a little longer (about five days) and the recovery at home will be six to eight weeks. The chances of converting to open surgery are small, about three to five in 100.

**Is there an alternative to surgery for gall stones?**

Unfortunately no alternative exists. The only successful treatment is to remove the gall bladder completely. The results of this operation are good and most patients can return to eating a normal diet.

**What are the risks of surgery?**

As with all operations there are risks but these are rare. They include:

- Bleeding, bruising and/or infection in one or more of the key-hole incision sites and protrusion of tissue through the wound.
- In a minority of cases pain caused by poor function of the gall bladder is not relieved by removal of the gall bladder.
- Bile duct injury with leakage of bile.
- Sometimes gallstones can slip into the common bile duct (the tube that connects the liver and the intestine) and cause blockage of bile. This can happen before or, rarely, after surgery. If this happens jaundice occurs (yellow colouration of the skin and urine) or pain in the abdomen. Whilst the chances of this complication are very small, if this problem does occur further surgery may be needed to remove the gall stone.

**Looking after your child at home**

- As the stitches are dissolvable they do not need to be removed.
- Your child may have some discomfort and should regularly be given pain killers such as Paracetamol and/or Ibuprofen.
• Your child can have showers because the dressings are waterproof. However, baths are not allowed for five days.
• The dressings can be gently pulled off after five days (it is easiest and less painful to do this in the bath).
• Your child should rest at home for two weeks.
• If your child develops signs of wound infection (redness at the site, fever) you should contact your nurse specialist/GP.
• If your child’s pain is not helped by simple pain killers such as Paracetamol and/or Ibuprofen you should contact your nurse specialist/GP.

Follow up
You will receive an appointment to attend the outpatient department for review approximately three months after your child’s operation.

Chaperoning:
During your child’s hospital visits he will need to be examined to help diagnose and to plan care. Examination, which may take place before, during and after treatment, is performed by trained members of staff and will always be explained to you beforehand. A chaperone is a separate member of staff who is present during the examination. The role of the chaperone is to provide practical assistance with the examination and to provide support to the child, family member/carer and to the person examining.

For further information please contact;
The ward you were on:

Your nurse specialist: 01223 586973

We are a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:
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