

# What you should know about your appendicectomy

## Other formats

If you need this information in another format such as audio tape or computer disk, Braille, large print, high contrast, British Sign Language or translated into another language, please telephone the PALS desk on 01271 314090.

## What is an appendicectomy?

An appendicectomy is a common and safe operation that is performed to remove your appendix, which is a closed ended narrow tube that extends out from your large bowel. Although the exact function of the appendix in the human body is unclear<sup>1</sup>, we know that its removal does not cause any problems.

## Why is it needed?

Having an appendicectomy is the best way of treating appendicitis, a condition which 6 out of 100 people will suffer from in their life time. We do not yet fully understand what causes appendicitis, but think that it starts by material in the bowel blocking the entrance to the appendix. This leads to bacteria (germs) growing inside and infecting the appendix, causing inflammation and swelling<sup>2</sup>.

The danger of not treating appendicitis is that the appendix may swell up so much that it bursts (perforates), releasing bacteria into the tummy.

This can lead to a condition called peritonitis which is life threatening and therefore, having an appendicectomy is the safest way to ensure this doesn't occur.<sup>3</sup>

## What is involved in removing an appendix?

An appendicectomy can be carried out with either key-hole or open surgery. If you are having key-hole surgery, the surgeon will begin by making a small cut below your belly button which is used to pump gas into your tummy to create space needed for the operation.

A long, thin camera with a light on the end, known as a laparoscope, is then placed into your tummy which is connected to a monitor, allowing the surgeon to see your appendix. Two further small cuts are then made in the tummy through which are inserted special instruments that are needed to remove your appendix.<sup>4</sup>

The surgeon may decide to switch to open surgery if continuing with key-hole surgery is too difficult because of scar tissue or if your appendix has perforated.

If you are having open surgery, the appendix will be removed through a 2 to 3 inch cut made in the lower right region of your tummy.

An appendicectomy usually takes between 60 to 80 minutes<sup>5</sup> and you should normally be fit to go home the following day.

## **Is there an alternative treatment?**

In certain circumstances, the alternative treatment to removing the appendix is to have a course of antibiotics. However, this is usually recommended only for patients not fit enough to undergo surgery, for example because of their age or medical conditions.

For the majority of patients, we strongly recommend having an operation as we know that those treated without surgery may have to stay in hospital for longer<sup>5</sup> and up to 37% will fail to improve on antibiotics alone<sup>7</sup>.

Furthermore, we know that around 20% of the patients who initially improve on antibiotics will end up coming back in to hospital with the same problem over the next year and 7.4% will develop a perforated appendix requiring emergency surgery.

## **How will I feel afterwards?**

### **After-effects of the anaesthetic**

It is normal to feel sleepy for the first few hours after your operation as the effects of your anaesthetic wear off and you may also notice problems with your memory and concentration which can last up to one day.<sup>4</sup>

We would advise you not to make important decisions or sign legal documents for at least 24 hours after having your anaesthetic.

The tube that was used to help you breathe during the surgery can irritate the back of the throat which might cause a sore throat after the operation.

### **Post-operative pain**

It is normal for your wounds(s) to feel sore and look swollen and bruised after the operation. You may also experience shoulder pain which is caused by the carbon dioxide that was used to inflate your tummy during your operation.

Regular pain killers shall be provided to make sure that you are kept as pain-free as possible. You should start to notice a reduction in the pain you feel within two to three days.

## Post-operative nausea and vomiting

Feeling nauseous and sickness are very common symptoms after surgery. If this happens to you, anti-sickness medications are available to help prevent you from feeling sick and a drip may be started if you are unable to drink enough fluids.

## What happens after the procedure?

We will monitor your vital signs such as your heart rate and temperature and your wounds will be regularly checked for any signs of infection.

You can start to eat and drink as soon as you feel comfortable to do so. You will be encouraged to get up from bed and sit in your beside chair after the first few hours and to walk after the first day. This activity helps you to recover more quickly.

Sometimes, a plastic tube will be placed inside your tummy towards the end of the operation to drain away blood and pus that accumulates after surgery. This usually gets removed after the first two days.

You will be fit to go home once you are eating and drinking normally, have opened your bowels, there are no signs of infection and you feel able to cope at home.<sup>4</sup>

## What are the risks?

Although an appendicectomy is a safe operation, it does carry the following risks:<sup>5</sup>

- 1) Bleeding during and after the operation
- 2) 6 to 7 out of 100 patients will have a wound infection
- 3) 3 to 5 out of 100 patients will develop an abscess (collection of pus) in the tummy resulting in increasing pain and fever. You may be taken back to theatre to have the pus removed if this occurs.
- 4) 9 out of 100 patients will get an ileus, a condition where the bowel temporarily shuts down leading to bloating, pain and vomiting. This usually resolves by itself but you may require a nasogastric tube, a tube inserted through your nose into your stomach for a period of time until your bowel starts working.

It is important to mention that for most people, these risks are lower than the risk of not having an appendicectomy, which includes perforation of the appendix leading to peritonitis, a life threatening condition.<sup>3,8</sup>

## Aftercare

### Medications to take home

We will ensure that you are discharged home with enough painkillers to help you to cope with your pain at home.

### Caring for your wounds

You should expect your wounds to be red and sore for one to two weeks after surgery but this will gradually improve over time. You may also notice some numbness around the wound which is due to damage to the small nerves in the skin. This may resolve with time but can be permanent. A supply of dressings will be provided for you to take home but by the fifth day you should find that dressings are no longer required. Showering is better than taking baths to prevent the wounds becoming soggy. If you do not have a shower, a shallow bath should be taken. Once you have washed yourself, pat your wound dry with a clean towel. If your stitches require removal, you will be given an appointment with your practice nurse.

### Resuming daily activities and sports

You can resume normal activities, including doing sport as soon as you feel comfortable but it is sensible to build up the level gradually.

We recommended you avoid strenuous exercise including contact sports and heavy lifting for one month. Sexual activity may resume as soon as you feel comfortable to do so, usually within a week or two.<sup>4</sup>

Swimming should be avoided for two weeks or until your wound has fully healed.

### Driving

It is essential that you are fit enough to perform an emergency stop before you start to drive again after your operation, otherwise, you will be putting yourself and others at risk and could invalidate your insurance. We recommend that you wait one to two weeks before driving. Nevertheless, you should also contact your insurance provider to clarify what they require.<sup>4</sup>

### Returning to work and school

The amount of time off work or school you need to take will depend on the type of surgery and your occupation. After key-hole surgery you may return to light work after just one week but will require two weeks if you have an active job that involves a lot of lifting and manual work.<sup>4</sup>

After open surgery, it is advisable to have three to four weeks off work. The nurses can give you a sick note to cover the time you are in hospital and for one more week. You will need to get further sick notes from your GP.

Children are advised to take two weeks off school.

## Follow up

You will receive information before you leave hospital if we would like you to be followed up as an outpatient.

Please contact your GP or your consultant's secretary at North Devon District Hospital (01271 322577) if you experience any of the following at home:

- Increasing redness, pain or swelling around your wound
- Persistent discharge of blood or pus from the wound
- Persistent vomiting or fevers.

## References

- 1) Society of American Gastrointestinal and Endoscopic Surgeons. *Patient Information for Laparoscopic Appendectomy from SAGES*. <http://www.sages.org/publications/patient-information/patient-information-for-laparoscopic-appendectomy-from-sages/>. (Date accessed 16/10/2014).
- 2) Shuhatovich & colleagues. *Laparoscopic Appendectomy*. <http://emedicine.medscape.com/article/1582228-overview#a01>. (Date accessed 14/09/2014)
- 3) Papandria D, Goldstein SD, Rhee D, Salazar JH, Arlikar J, Gorgy A, Ortega G, Zhang Y, Abdullah F. Risk of perforation increases with delay in recognition and surgery for acute appendicitis. *J Surg Res* 2013;184(2):723-729. DOI: 10.1016/j.jss.2012.12.008. (Date accessed 02/10/2014)
- 4) Rory Farrell. *Appendicectomy patient information leaflet*. 2<sup>nd</sup> ed. Gateshead. Gateshead Health NHS Foundation Trust; 2010. Information leaflet number NoIL323.[www.qegateshead.nhs.uk/sites/.../leaflets/IL323%20Appendicectomy.pdf](http://www.qegateshead.nhs.uk/sites/.../leaflets/IL323%20Appendicectomy.pdf)
- 5) Namir Katkhouda, Rodney J. Mason, Shirin Towfigh, Anna Gevorgyan and Rahila Essani. Laparoscopic Versus Open Appendectomy A Prospective Randomized Double-Blind Study. *Annals of Surgery* 2005; 242( 3):439-450. (Date accessed 05/09/2014).

- 6) McCutcheon BA, Chang D C, Marcus LP, Inui T, Noorbakhsh A, Schallhorn C, Parina R, Salazar FR, Talamini MA. Long-term outcomes of patients with nonsurgically managed uncomplicated appendicitis. *JACS* 2014; 218(5):905-13. DOI: 10.1016/j.jamcollsurg.2014.01.003. (Date accessed 04/10/2014).
- 7) Krishna K Varadhan, Keith R Neal, Dileep N Lobo. Safety and efficacy of antibiotics compared with appendectomy for treatment of uncomplicated acute appendicitis: meta-analysis of randomized controlled trials. *BMJ* 2012; 344-359. DOI: 10.1136/bmj.e2156. (Date accessed 06/09/2014).
- 8) Kirby A, Hobson RP, Burke D, Cleveland V, Ford G and West RM. Appendectomy for suspected uncomplicated appendicitis is associated with fewer complications than conservative antibiotic management: A meta-analysis of post-intervention complications. *J Infect* 2014; pii:S0163-4453(14):00269-2. DOI: 10.1016/j.jinf.2014.08.009. (Date accessed 05/09/2014)

## PALS

The Patient Advice and Liaison Service (PALS) ensures that the NHS listens to patients, relatives, carers and friends, answers questions and resolves concerns as quickly as possible. If you have a query or concern call 01271 314090 or e-mail: [ndht.pals@nhs.net](mailto:ndht.pals@nhs.net). You can also visit the PALS and Information Centre in person at North Devon District Hospital, Barnstaple. Alternatively, it may be possible for us to arrange an appointment in your area.

## Have your say

Northern Devon Healthcare NHS Trust aims to provide high quality services. However, please tell us when something could be improved. If you have a comment or compliment about a service or treatment, please raise your comments with a member of the ward staff or the PALS team in the first instance.

'Patient Opinion' comments forms are on all wards or online at [www.patientopinion.org.uk](http://www.patientopinion.org.uk).

Northern Devon Healthcare NHS Trust  
Raleigh Park, Barnstaple  
Devon EX31 4JB  
Tel. 01271 322577  
[www.northdevonhealth.nhs.uk](http://www.northdevonhealth.nhs.uk)

© Northern Devon Healthcare NHS Trust  
This leaflet was produced by the Communications Department.  
Please contact 01271 311575 to help us improve our leaflets.