

What do I need to know about having a mesh?

What is a mesh?

MESH is a foreign material implanted or inserted into the human body to support, reinforce or replace tissue that has become weak or deficient. The MESH is used in certain circumstances to try to replace or strengthen tissues that have lost their support. MESH was originally used to repair hernias and has been found to be relatively safe in this use. There are concerns that the MESH implant can become infected as it is a foreign body. Surgeons are therefore careful in selecting patients for MESH implant and surgeons use MESH when it is relatively safe and necessary.

A mesh is often used in prolapse surgery. A prolapse is a protrusion of the rectum (lower bowel) from outside the anus and it can come completely out after having your bowels open. It can be caused by sagging of the natural supporting tissues which usually hold the rectum in place. The mesh is used to try to replace or strengthen these supporting tissues. There are lots of different meshes available. Some are absorbed by the body and form lots of scar tissue which supports the lower bowel. Others do not absorb and therefore stay in place forever. Other meshes are made from a 'biological' tissue, usually derived from pig skin, which are supposed to become part of the body's normal tissue over time.

What is the advantage of using a mesh?

During operations for prolapse, the surgeon tries to repair or strengthen the weakened supporting tissues. However, it has been known for a long time that these repairs can fail. This can mean that the prolapse comes back. In order to reduce the risk of surgery failing, mesh materials have been developed with the aim of strengthening the repair. Permanent mesh provides lifelong strength.

The first meshes used were similar to the strong meshes used^[1] by surgeons to treat a hernia (rupture) in the tummy wall. However, the vagina is very different to the tummy wall and the meshes have changed over the years as we have learnt more about how they behave once they

have been inserted.

What are the disadvantages of a permanent mesh?

Unfortunately, there are disadvantages of inserting any artificial material into the body. Rarely, the material can become infected or recognised by the body as 'foreign' and be rejected. Scar tissue can form around the mesh making the rectum and vagina stiffer and could cause pain. This pain could be felt during sexual intercourse. This problem is seen more often when a mesh has been used for a prolapse of the vagina, rather than the bowel.

Over time, the mesh can wear through the tissues so that it pokes through the wall of the bowel, and it is possible to come through the wall of the vagina. This is called erosion and can occur many years after the mesh has been put in. This is more common with surgery for a prolapse of the vagina rather than a bowel prolapse. Not all meshes are the same and some seem to have much lower risks of problems than others. However, erosion often needs further surgery to remove parts or all of the mesh. Removing mesh from bowel can be complicated surgery.

In contrast, prolapse is not dangerous or harmful condition. The risk of having complications from the mesh needs to be weighed carefully against the bother you are getting from your condition.

What are the disadvantages of an absorbable mesh?

Absorbable meshes are gradually absorbed by the body. The speed at which this happens is different for everyone. For some women, the mesh can absorb and disappear very quickly before the body has had time to heal fully from the surgery. This may make it more likely that the prolapse will come back. For other women, the mesh is absorbed very slowly and can be still there many years after it was put in.

Absorbable meshes can become infected or rejected in the same way as permanent meshes. They have less risk of wearing through tissues over time and are very unlikely to wear through the bowel wall or vagina in the long term. However, they seem to have a much lower chance of preventing the prolapse coming back than permanent meshes. Therefore the risk of the prolapse coming back over time is higher with an absorbable mesh.

In the operation the ventral mesh rectopexy,(also called an LVR) we currently don't know which type of mesh is the best in relation to avoiding mesh erosion or reducing the risk of the prolapse coming back in the future. The advantages and disadvantages of using a mesh in your operation will be discussed with you by a specialist surgeon and they will select an appropriate

mesh for your prolapse to minimise the risks or complications.

If I would like a prolapse repair that uses mesh, what can be done to reduce the risk of a mesh complication?

Most women in the UK having an operation for prolapse will **not** need mesh. Mesh can be very helpful in operations for rectal prolapse (Laparoscopic mesh rectopexy). At the start of these operations, antibiotics are given to reduce the risk of the mesh becoming infected. Smokers are at much higher risk of mesh erosion than non- smokers. Stopping smoking may, therefore reduce the risk.

What do other doctors/organisations think about using mesh?

Surgeons have had concerns for many years about the potential for meshes to cause complications in some women. Several studies have been performed to try to find out exactly what the advantages and disadvantages of these operations are. So far, the results have given different, sometimes opposite, results. Some very large studies are being performed in the UK at the moment and they will provide more information over the next few years.

The FDA (the US Food and Drug Administration, who regulate mesh in the USA) have also been concerned about mesh complications. They have published advice for both doctors and patients in the USA about using mesh. They are more concerned about vaginal mesh repairs for prolapse rather than mesh used for rectal prolapse repairs. The National Institute for Health and Clinical Excellence (NICE) have also published advice for doctors about using mesh in the UK.

How will I know if I have developed a problem with my mesh?

Although problems can occur, **MOST** women will never have a problem with their mesh. If a problem does occur, the symptoms can be vague and 'non-specific'. This means that they could be caused by other things and not your mesh. However, if you are worried about your symptoms you should be seen by your specialist even if you develop problems years after your operation. Problems with your mesh can be difficult to spot and you should be seen at a specialist pelvic floor centre can be helpful.

Checklist of questions to ask your doctor before having a mesh inserted

You should let your doctor know if you have had a reaction in the past to mesh materials such as polypropylene. You might find it helpful to ask your doctor the following questions before having an operation which involves mesh:

- What are the pros and cons of using mesh in my particular case?
- Could the operation be done without mesh?
- What is your experience of using this particular mesh? What experience have your other patients had with this product?
- What is your experience of dealing with complications from this product?
- What should I expect to feel after my operation and for how long?
- Are there any specific side effects that I should let you know about after the surgery?
- What happens if the mesh doesn't help my problem?
- If I have a complication, can the mesh be removed and what would the consequences be?
- Is there a patient information leaflet that comes with the product? Can I have a copy?

Other sources of information

The Pelvic Floor Society website has a statement regarding the use of mesh in rectal prolapse surgery, including other patient information leaflets on procedures for rectal prolapse.

The Royal College of Obstetricians and Gynaecologists has a statement about mesh use, which includes some useful links to other websites, here:

www.rcog.org.uk/news/rcog-statement-report-commissioned-mhra-vaginal-tape-and-mesh-implants

The FDA advice regarding mesh can be found here:

www.fda.gov/MedicalDevices/Safety/AlertsandNotices/ucm142636.htm#popsui

There is information about medical devices, such as mesh, available from the MHRA. Their website can be found at:

www.mhra.gov.uk

The NICE guidelines about mesh procedures for pelvic organ prolapse can be found on their website:

www.nice.org.uk

