
Adhesions

Summary

- An adhesion is a band of scar tissue that joins two surfaces of the body that are usually separate.
 - The formation of scar tissue is the body's repair mechanism in response to tissue disturbance caused by surgery, infection, injury (trauma) or radiation.
 - Surgery to remove the adhesions (adhesiolysis) will cause more adhesions to form in around 70 per cent of cases.
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An adhesion is a band of scar tissue that joins two internal body surfaces that are not usually connected. Organs or tissues within the body stick (adhere) to other internal surfaces.

Adhesions develop as the body attempts to repair itself. This normal response can occur after surgery, infection, injury (trauma) or radiation. Adhesions may appear as thin sheets of tissue similar to plastic wrap, or as thick fibrous bands.

Adhesions can affect the female reproductive organs (ovaries, fallopian tubes), the bowel, the area around the heart, the spine and the hand. They can cause a range of problems including infertility, dyspareunia (painful intercourse), pelvic pain and bowel obstruction or blockage. Adhesions can also lead to a complex set of problems called adhesion-related disorder (ARD).

Adhesions are a widespread problem. Up to 93 per cent of people who have abdominal surgery go on to develop adhesions. Abdominal adhesions also occur in 10 per cent of people who have never had surgery.

Risks of adhesions

Adhesions may:

- develop after any kind of pelvic or abdominal surgery – people who have major or multiple procedures are even more at risk
- cause significantly higher post-operative complications (leaks, wound infections, haemorrhages) in people with adhesion-related perforations. This may also lead to a longer stay in hospital
- lead to other risks and complications, including small bowel obstructions, infertility and chronic pelvic pain
- cause increased risk, complexity and complications during subsequent surgery.

The incidence of adhesions has increased with the rise in gynaecological procedures. Up to 90 per cent of women suffer post-operative adhesions following major gynaecological surgery.

Development of adhesions

Adhesions develop as the body attempts to repair itself. This is the body's normal response after:

- surgery, particularly abdominal surgery
- infection
- endometriosis
- injury (trauma)
- radiation treatment.

Adhesions can also form after inflammation in the abdomen or pelvis.

Symptoms of adhesions

Although most adhesions are painless and do not cause complications, adhesions cause 60 to 70 per cent of small bowel obstructions in adults and are believed to contribute to the development of chronic pelvic pain.

Adhesion-related disorder (ARD) is a group of symptoms that may occur as a result of adhesions. A person with ARD will usually experience chronic abdominal pain.

Typical adhesions form within the first few days after surgery, but symptoms can last for months or even years. Symptoms may be mostly in one area of the abdomen, but are often generalised, vague, 'crampy' and difficult to define. This means ARD can be difficult to diagnose.

Symptoms of ARD may include:

- chronic pain
- infertility
- bowel obstruction and an inability to pass gas
- urinary bladder dysfunction
- pain and difficulty having a bowel movement
- pain on movement such as walking, sitting or lying in certain positions
- emotional disorders such as depression, thoughts of suicide or hopelessness.

Other intestinal problems may include constipation, obstruction, or alternating constipation with diarrhoea from partial obstruction.

Women may experience gynaecological problems, which can add to the anxiety and self-esteem problems that may already be experienced by women who suffer with this disorder.

Symptoms of ARD can be mistaken as a sign of another condition. These can include a whole host of other possible diagnoses such as chronic fatigue syndrome, endometriosis, irritable bowel syndrome, fibromyalgia, depression and anxiety.

Diagnosis of adhesions

It is very difficult to diagnose the chronic pain of adhesions correctly. Diagnostic tests such as blood tests, x-ray procedures, CT scans, MRIs and ultrasound will not diagnose adhesions. Hysterosalpingography (an x-ray that views the inside of the uterus and fallopian tubes) may help diagnose adhesions inside the uterus or fallopian tubes.

According to your symptoms, your doctor will order the appropriate diagnostic tests to rule out other medical conditions that may have similar symptoms.

If the results of these tests are normal or negative for abnormal pathology, a diagnostic laparoscopy may be appropriate. This is the only test that can confirm the presence of adhesions. If adhesions are found, you doctor can usually release them during the same surgery.

Treatment of adhesions

Adhesions can be treated either with open or laparoscopic (keyhole) surgery, known as adhesiolysis. The adhesions are cut by scalpel or electrical current.

Open adhesiolysis

As adhesions are likely to form after certain surgical procedures, open adhesiolysis may not be worthwhile, except to remedy serious problems such as bowel obstruction.

In around 70 per cent of cases, the operation to remove the original adhesions will cause more adhesions to develop. Discuss the risks, benefits and alternatives to surgery thoroughly with your doctor before you make a decision.

Laparoscopic adhesiolysis

People with symptoms of adhesions may consider laparoscopic surgery. The advantage of this procedure is that only a small incision (cut) is required, which is why it is also known as 'keyhole surgery'. Laparoscopy is the preferred method for performing infertility surgery as there is a decreased risk of new adhesions forming.

Laparoscopic adhesiolysis can significantly improve quality of life among women with chronic pelvic pain due to adhesions. This procedure shows similar results to more invasive forms of surgery when it comes to managing extensive adhesions. However, it can be time-consuming (the procedure may take two to four hours), technically difficult and involves some risk.

Most women who choose to have laparoscopic adhesiolysis:

- are discharged on the same day of the procedure
- don't need to have major abdominal cuts (incisions)
- experience minimal complications
- return to full activity within one week of the procedure.

Non-surgical treatments for adhesions

Alternatives to surgery include:

- medication – this is often the first treatment choice for acute pain and forms part of the treatment for chronic pain
- exercise
- physical therapy
- lifestyle changes.

Although they can be helpful, medications are not a cure-all. They can cause side effects or may be ineffective, and are often costly. A pain specialist can advise you on the non-surgical treatment options most suited to your situation.

Where to get help

- Your doctor
- NURSE-ON-CALL. Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)

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