

Adhesions

An adhesion is a band of scar tissue that joins two internal body surfaces that are not normally 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 may be found on 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 of problems called adhesion related disorder (ARD).

Adhesions can follow abdominal surgery

Adhesions are a widespread problem. Up to 93 per cent of people who have abdominal surgery go on to develop 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 and length of stay in hospital) in people with adhesion-related perforations.
- 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.

Causes 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.

Adhesions related disorder (ARD)

Adhesions related disorder is a group or 'complex' of symptoms that may occur as a result of adhesions. A person with ARD will usually experience chronic abdominal pain. Their symptoms may be mostly in one area of the abdomen but are often generalised, vague, 'crampy' and difficult to define. This means ARD may be difficult to diagnose.

Symptoms of ARD could include:

- Chronic pain
- Infertility

- Bowel obstruction and no passing of gas
- Gastro-esophageal reflux disease (GERD)
- 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 problems with self-esteem already 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 related disorder (ARD)

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 may help diagnose adhesions inside the uterus or Fallopian tubes.

Depending on 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 and/or endometriosis.
- If adhesions are found, you doctor can usually release them during the same surgery.

Medical issues to consider and adhesions

Since adhesions are likely to form after certain surgical procedures, adhesiolysis (surgical removal of adhesions) may be pointless, except to remedy serious problems like 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.

Non-surgical treatment of adhesions

Alternatives to surgery include:

- Medication – this is often the first treatment choice for acute pain and forms part of a 'treatment package' for chronic pain
- Exercise
- Physical therapy
- Lifestyle changes.

Although they can be helpful, medications aren't 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.

Laparoscopic surgery and adhesions

People with adhesion symptoms 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 (de novo) adhesions forming.

Laparoscopic adhesiolysis can be time-consuming (may take two to four hours), is technically difficult and involves some risk. However, this procedure shows similar results to more invasive forms of surgery when it comes to managing endometriosis and extensive adhesions.

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.

Where to get help

- Your doctor
- Nurse-on-Call Tel. 1300 606 024 – for expert health information and advice (24 hours, 7 days)

Things to remember

- 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. A complete intestinal obstruction is life threatening and requires immediate medical attention and surgery.
- Surgery to remove the adhesions (adhesiolysis) will cause more adhesions to form in around 70 per cent of cases.

This page has been produced in consultation with, and approved by:

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