Adhesions

**What are adhesions?**
Adhesions are strands of tissue that form in the body in response to injury. Abdominal cavity is one of the commonest sites where adhesions tend to form.

**When do they occur?**
Occasionally adhesions are present from birth. More commonly, however, they form following abdominal operations. Everyone is different in the way his or her body responds to an operation. Some people form extensive adhesions after an abdominal operation, while others undergoing a similar surgery may develop very few adhesions. Unfortunately, there is no way of predicting the severity of adhesions a patient is likely to develop after surgery. Adhesions are also known to develop after an attack of infection such as appendicitis or inflammation of gallbladder (cholecystitis). Adhesions make loops of intestine stick to one another or cause a loop of intestine to stick to the inner surface of the abdominal wall.

**What are the symptoms?**
Often patients with adhesions do not experience any symptoms. When adhesions do produce symptoms, they are likely to be of one of the following two types: Symptoms of intestinal obstruction Sometimes adhesions entrap a portion of intestine and the normal flow of contents through the intestine gets blocked leading to intestinal obstruction. The symptoms of this condition are:
- Cramping abdominal pain
- Distention of the abdomen
- Intermittent or repeated vomiting, and
- Difficulty with passing gas or having a bowel movement
The patient may experience a sudden (acute) attack or the symptoms may be of recurrent nature. Sometimes the blockage in the intestine may get relieved on its own and the symptoms settle down within a few hours or days. More often than not the patient needs to be hospitalized for treatment that may involve an operation to correct the problem.

**Chronic pain in the abdomen:** Sometimes adhesions are responsible for vague, intermittent pain in the abdomen that may go on for years. This occurs as a result of traction on the loops of intestines and is felt as a pulling sensation in the abdomen.

**How are adhesions diagnosed?**
The doctor can often suspect the possibility of a patient having adhesions from his symptoms. If taken during an attack of acute pain, an abdominal x-ray may show gas-filled, dilated loops of intestine suggesting the possibility of adhesions. Sometimes a test called barium meal follow-through has to be performed. In this test, the patient is made to drink a milky white liquid (containing barium sulphate) and a series of x-rays are taken to outline various parts of intestine. The x-rays may show up a hold-up or a blockage in the intestine. However, more often than not none of these tests are able to diagnose adhesions with certainty. In such cases the best way to diagnose the problem is by performing laparoscopy.
In fact, the main advantage of using laparoscopy in this situation is that the adhesions can be diagnosed as well as treated at the same time.

**Laparoscopic surgery for abdominal adhesions**
Laparoscopic surgery is an operation in which inside of the abdomen is examined by means of a telescope called a laparoscope. The operation is performed by making two or three small punctures (about 0.5 to 1 cm in size) on the abdomen – i.e., without making a big incision. In fact, no other test or investigation can diagnose adhesions with certainty – looking for them through a laparoscope is the only way confirming their presence. If the surgeon encounters adhesions, they can be easily divided using long laparoscopic
instruments. The procedure is called adhesiolysis. A patient recovers quickly after laparoscopic surgery for adhesions as he / she has very little pain.

**What happens after the operation?**
How soon you are allowed to drink liquids and eat food after your adhesiolysis operation depends on the extent of adhesiolysis. Generally, you will be allowed to drink fluids within 6 – 8 hours after the operation. You may be given a saline drip for that period. In the first 12 – 16 hours after recovery you may experience some nausea, but this soon passes away.

**What about the pain after surgery?**
After any laparoscopic operation there is some pain at the site of the cuts for a few days. With the laparoscopic operation this is much less as compared to the open operation. You will be prescribed medicines to control the pain. Also, you will be encouraged to get out of the bed soon after the operation despite the slight discomfort. Over a period of time the pain will gradually reduce and become almost negligible.

**How soon can I resume work?**
This depends very much on the nature of the job you do and the type of operation you have had. Most patients are able to return to light desk job within 8 – 10 days after surgery and almost all activities will be permitted after about 15 days after surgery.

**What are the risks of laparoscopic adhesiolysis?**
Any operation may be associated with complications. The primary complications of any operation are bleeding and infection, which are uncommon with laparoscopic adhesiolysis. There is a small risk of injury to the intestines which may be stuck to the scar of previous surgery. In the hands of surgeons experienced in laparoscopic surgery, however, this risk is negligible.

**Can adhesions reform?**
It is impossible to predict whether a person will have recurrent problems with adhesions after an operation. If he / she has had adhesions after previous surgery it is likely that they may occur again. In fact, adhesions are also known to form after surgery undertaken to tackle existing adhesions. It must be remembered that adhesions are far more likely to form after an open operation than after a laparoscopic one. It is for this reason that laparoscopic adhesiolysis is the best form of treatment for patients suspected to have adhesions.

**What are the advantages of laparoscopic adhesiolysis?**
- Less pain from the incisions after surgery
  - Shorter hospital stay
  - Shorter recovery time
  - Faster return to normal diet
  - Faster return to work or normal activity
  - Better cosmetic healing
  - Lower chance of re-formation of the adhesions

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