

# Asherman's syndrome

## What is Asherman's Syndrome?

Asherman's syndrome is named after Dr Asherman, an Israeli gynaecologist, who first described the condition in the mid twentieth century when he noted that some women who had surgical treatments at the time of pregnancy stopped having periods after this treatment. Nowadays the term is also used to describe a reduction or absence in menstruation that may be due to scar tissue formation inside the uterus and can occur as a result of pregnancy and delivery, infection or gynaecological surgical procedure.

## What causes intra-uterine scarring or adhesions?

The majority of cases are associated with surgical procedures involving the uterus when pregnant, especially if there is a miscarriage or termination of pregnancy between 12 and 20 weeks. The inside of the uterus, called the uterine cavity, is covered by a layer of tissue known as the endometrium, which under normal circumstances can respond to injury very quickly and repair itself fully and easily. This is important since the uppermost layer of the endometrium is lost every month during menstruation (periods) and a new layer starts to grow. During pregnancy however the ability of the endometrium to respond to injury is reduced since Progesterone, the pregnancy hormone, prevents the endometrium from growing in its usual rapid fashion. It is not only the effect of progesterone which reduces the ability of the endometrium to regenerate, but also other factors that may contribute to scarring inside the uterus. These factors may include infection and trauma associated with the use of instruments in the uterus, essential for the performance of the procedure.

Most doctors agree that intra-uterine adhesions are the result of surgical treatments of the uterus during pregnancy, complicated by an infection, which remained undetected or untreated at the time. However there is a good chance that intra-uterine scarring can occur under different circumstances. One of these is the surgical intervention on the non-pregnant uterus. The surgical removal of fibroids (called myomectomy) from the uterus is a surgical procedure which has gained popularity, not necessarily due to the greater incidence of fibroids, but more due to the greater demand to preserve the uterus. Fibroids, due to their mere presence, cause the entire uterus to enlarge, thereby stretching the blood vessels that supply the various parts of the uterus. When the fibroids are removed, the remaining uterus collapses down to a smaller volume and some of the blood vessels that supply the endometrium may become blocked. Because of the lack of oxygen and nutrients, that area of tissue may die and a scar may form leading to Asherman's syndrome.

This scenario has never really been proven, but could contribute to the scarring that leads to Asherman's syndrome. A further possible cause is when patients have had radiation treatment to the pelvis. It is well accepted that to the use of radiation for treatment of, for instance, bowel cancer will reduce the blood flow to the uterus and cause scarring. In addition the ovaries may be affected by radiation and produce less estrogen. Oestrogen is the hormone that causes the endometrium to grow, and its absence will worsen the problem.

## How does a women know that she has intra-uterine scarring?

The most common symptom is the reduction in volume, or absence of the menstrual flow, following a gynaecological surgical procedure such as a curette (D and C) or delivery of a baby. The flow completely ceases in true 'Asherman' cases. The reduction in menstrual flow can be accompanied by an increase in pain with the period, as the uterine muscle has to work harder to get rid of the menstrual fluid past the scar tissue. In some cases the pain can be very severe and hospital admission may be required, since the build up of menstrual fluid inside the uterus causes pressure and needs to be relieved. This is called a haematometra and is like a large bruise inside the uterus.

It is quite possible that there are women who do not have any symptoms if they have a small number of adhesions.



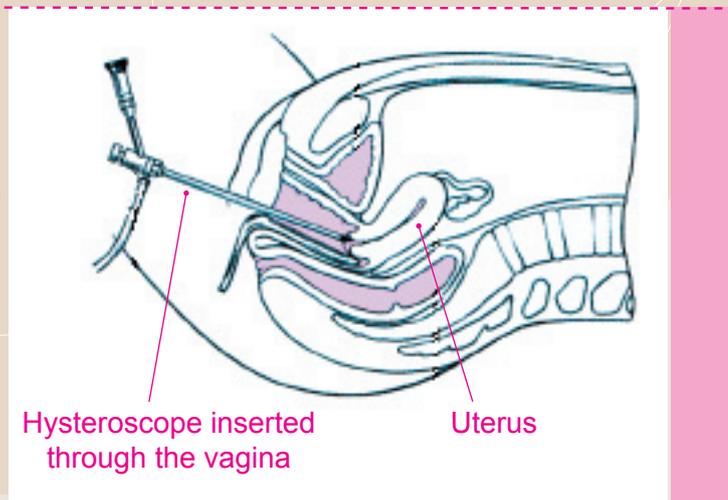
Hysteroscopic view of Asherman's syndrome

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We do not know whether a small number of adhesions have a significant effect clinically on fertility or menstrual function, and occasionally these adhesions are found when investigation is undertaken for another reason. The most common procedure to find such adhesions would be a hysteroscopy (please see our Information Brochure entitled *Preparing for Hysteroscopy*).

## How is Asherman's Syndrome treated?

The best way to treat Asherman's Syndrome is to remove the scar tissue that is present and then to increase the growth of the endometrium so that no new scar tissue forms. Over the past 20 years a well-defined surgical approach to intra-uterine scarring has given excellent results with a return to normal menstrual flow and fertility. The timing of the procedure is important since it is best to do this when the endometrium is growing most rapidly and will repair quickly. The procedure itself is performed either under general or under local anaesthesia. A telescope called a hysteroscope is inserted into the uterus through the cervix (no cuts need to be made) and the inside of the uterus can be seen on a television screen. The presence and extent of the adhesions can be noted at this time. Sometimes it is not possible to see inside the uterus immediately and X-rays may be used to find where the uterine cavity is and define all of the scar tissue. The use of these X-rays can also determine if the fallopian tubes are open. When the scar tissue is very severe, a needle is introduced into the scar tissue beside the hysteroscope. The needle is used to probe the space beyond the adhesion, in search of pockets of normal cavity. Little by little the surgeon is thereby able to open up all the pockets and to reconstruct a near normal cavity.



Antibiotics are used to reduce the risk of infection at the time of surgery and we prescribe oestrogen for three weeks after surgery to try and increase the repair of the endometrium and reduce the likelihood of scar formation. At the end of the three week period, the oestrogen is stopped for one week, but may be recommenced for a further three weeks on and one week off cycle. A repeat hysteroscopy is then performed 4, 8 or 12 weeks later to check whether the uterine cavity and cervical canal are clear and would allow both

normal menstruation and the possibility of pregnancy. We have noted that scar tissue that occurs in the upper part of the cervix has a high chance of recurring and multiple procedures may be necessary. Recently we have started using a gel to keep the walls from sticking together again after the surgery and have had good success with pregnancy resulting.

## Commonly Asked Questions

### 1. Will one surgery fix my adhesions?

There are two main factors that contribute to the number of surgeries required. The first is the location of the adhesions, and the second is the extent of the adhesions.

The average number of surgeries required to reconstruct the cavity is 2, though this can vary from 1 - 6.

### 2. When can I become pregnant after my surgery?

We recommend that you wait for one complete cycle after your have stopped hormonal preparations and have had approval from your doctor that the cavity is normal.

### 3. How long will it take to become pregnant?

The length of time to become pregnant is variable and we recommend trying for no less than 12 months after you have had approval from your doctor that the cavity is normal.

### 4. How do I know that the cavity is normal?

There are direct and indirect assessments.

The only direct assessment is to look inside the uterus with a hysteroscopy. This can be done as an outpatient and does not require a general anaesthetic.

Indirect assessments include the patterns of menstruation and a pelvic ultrasound that can look at the thickness of the endometrium or uterine lining. Whilst not as good as directly looking inside the uterus, these are less invasive tests.

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## 5. Can the condition recur?

It is possible that the cavity is cleared of adhesions and a pregnancy continues to delivery and then there is a return of scar tissue.

In this situation it may be necessary for repeat procedures to be performed so that normal periods are re-established or the cavity can be reopened for further pregnancies.

## 6. Does this condition have to be treated?

No. If you have no symptoms such as pain and you are certain that you do not want to have any more children, then there is no need to treat Asherman's syndrome.

No harm will come from the scar tissue itself, though you may have reduced or no periods until your reach menopause.

### Disclaimer

This medical and other information represents the carefully-considered opinions of the providers involved and is based on their knowledge and experience. It is NOT applicable to all patients nor all providers and should not be interpreted out of context, or be used for any purpose it was not intended for.

We do not provide the user with a medical opinion applicable to her particular situation. Our goal is to EDUCATE the user, to provide some guidelines in dealing with specific concerns, and to indicate alternative options you might consider or discuss with your physician. The user is encouraged to consult her care provider with any questions or concerns that she may have regarding their condition and to further explore the available options.

You should ask your doctor about this subject. This information is general and does not contain all known facts about the treatment or complaint. The benefits and