

## Asherman Syndrome

Asherman syndrome is characterized by endometrial adhesions and/or fibrosis. It occurs most often due to dilation and curettage, but can also result from longstanding pelvic inflammatory disease. Clinical features include infertility with recurrent miscarriages and abnormal uterine bleeding. Diagnosis can be made via a lack of bleeding following a progesterone withdrawal test. On ultrasound, the adhesions and fibrosis may give a "honeycomb uterus" appearance. Symptomatic patients can be treated with surgical resection of the fibrotic tissue.



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### Characteristics

#### Endometrial Adhesions or Fibrosis

[Endometrium Adhesive-tissue and Fibrous Sac](#)

Adhesions and fibrotic tissue in the uterus, particularly affecting the endometrium is characteristic of Asherman syndrome. This leads to loss of healthy endometrial mucosa.

### Etiology

#### Pelvic Inflammatory Disease

[Ovaries-and-uterus on Fire](#)

Pelvic inflammatory disease (PID) can result in Asherman syndrome over time. The most common causative organisms are *Chlamydia trachomatis* and *Neisseria gonorrhoeae*. The longstanding inflammation can heal by fibrosis, thus decreasing functional endometrial tissue surface area.

#### Dilation and Curettage (D&C)

[Dyed-dilation with Carrot-trap](#)

The most common cause of Asherman syndrome is dilation and curettage (D&C) of the intrauterine cavity. This procedure might be necessary for spontaneous abortions or retained products of conception.

### Clinical Features

#### Infertility

[Infertile-female-plant](#)

Patients may seek medical help after trying to conceive for several months or years without success. Infertility is an important clinical feature of this disease.

#### Recurrent Miscarriages

[Recurring Missed-carriage](#)

Recurrent pregnancy loss (RPL) is another feature of Asherman syndrome. The fibrotic tissue may allow fertilization, but after some weeks, the embryo/fetus becomes nonviable because of decreased placental/endometrial interfacing for survival.

## Abnormal Uterine Bleeding

### Abnormal Uterus Bleeding

Abnormal uterine bleeding (AUB), secondary amenorrhea, and periodic abdominal/pelvic pain are often seen in this disease.

## Diagnosis

### No Bleeding after Progesterone Withdrawal

#### No-sign Blood with Pregnant-jester making a Withdrawal

The progesterone challenge can be performed to assess for Asherman syndrome. Progesterone is administered (oral or intramuscular injection). After about 2 weeks, withdrawal bleeding is a positive response indicating functional estrogen levels and uninterrupted outflow. A patient with Asherman syndrome may not experience significant bleeding after this 2-week time indicating a possible outflow tract obstruction due to intrauterine adhesions/synechiae or other fibrotic tissue.

### Honeycomb Uterus

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Hysterosalpingoscopy will reveal a honeycomb or lacunar appearance of the uterus, which pertains to the adhesions. The adhesions presenting as filling defects often lack the ability to distend into the endometrial cavity.

## Management

### Surgical Resection

#### Surgeon

A hysteroscopic resection of the endometrial adhesions is the only treatment of Asherman syndrome and should only be performed if the patient is symptomatic.