Intrauterine Adhesions - IUA

Patient Information Series – What you should know, what you should ask.

What are intrauterine adhesions (IUA)?

The inside of the womb is like a balloon with the front and back walls flat against one another. The inner walls of the uterus are lined with tissue (endometrium). During menstruation, the top layer of the endometrium sheds and regrows. Injury and/or infection to the endometrium can result in scar tissue (adhesions) between the inner walls of the uterus causing them to stick to one another. This is known as intrauterine adhesions (IUA). The scarring can vary from mild, resulting in few/no symptoms, to severe with extensive obliteration of the cavity and cessation of periods.

What are the potential causes of IUA?

The most common cause of IUA is an injury to the endometrium inside of the uterus following a surgical procedure. Dilation and curettage (D&C) is a common surgical procedure that can be performed for pregnancy complications such as miscarriage, termination or removal of placental tissue, and gynaecological conditions causing abnormal bleeding. D&C involves opening the cervix and removing some of the tissue in the uterine cavity. Other less common causes of IUA includes surgical removal of fibroids (myomectomy) or uterine septum, Caesarean section, embolization, and infection (endometritis). Endometrial ablation is a surgical procedure that is used to intentionally create IUA to allow the uterine walls to stick together and make periods lighter or stop completely.

What symptoms are associated with IUA?

Not all women with IUA will have symptoms. Other women, however, may notice changes to their menses which include absent, light, or infrequent periods. If the adhesions are causing a blockage to the menstrual flow, women may experience pelvic pain. IUA can also be associated with pregnancy-related complications such as difficulties in conceiving, recurrent miscarriages, abnormal implantation of the placenta, premature birth or intra-uterine growth restriction (IUGR).

How are IUA diagnosed?

IUA can be diagnosed using transvaginal ultrasound (TVS), hysteroscopy, or hysterosalpingography (HSG). TVS is an accurate method for screening and diagnosing IUA in the outpatient department, without the need for anaesthesia. A three-dimensional (3D) reconstruction of the uterus can be performed at the same time to map the location of the IUA. In addition, saline (a salt-water solution) can be infused through a small plastic tube in the cervix to separate the uterine walls, whilst performing the TVS to see the uterine cavity. This is known as saline infusion sonography (SIS).

HSG is a similar screening test but requires x-rays and dye to be infused into the uterine cavity. Both SIS and HSG show IUA as “filling defects”, which are spaces where the fluid does not flow freely. Some women may experience cramping during the procedure, which is reduced with analgesia.

Hysteroscopy is a procedure where a thin, lighted telescope is inserted through the cervix to allow direct visualisation inside the uterus. It can be performed under local or general anaesthetic and allows treatment of IUA at the same time.

How are IUAs treated?

The treatment of choice is to cut the scar tissue using a special operating hysteroscope (hysteroscopic adhesiolysis). This is usually performed under general anaesthetic but in some cases, can be performed in the outpatient setting. Following the hysteroscopic adhesiolysis, your doctor may insert either a coil or a balloon/catheter inside the uterus to keep the walls apart and reduce the chance of IUA reforming. You may also be given hormonal treatment with oestrogen to promote endometrial growth and reduce the risk of IUA returning. In severe cases, it may be necessary to have further surgery to treat the IUA.

What could be the long-term issues with IUA?

Even after treatment, some women may continue to have absent or infrequent/light periods. The recurrence rate of IUA varies greatly depending on the initial severity, with rates ranging between 3% to 60%. Pregnancies that occur after treatment are more likely to be complicated by miscarriage, premature labour, or an abnormal attachment of the placenta to the uterine wall. Successful conception rates are between 40% to 66% and live birth rates vary between 64% to 86%. The overall chance of a successful pregnancy after treatment is related to the initial extent of IUA.

What other questions should I ask?

- Can you predict or prevent IUA from occurring?
- Do I have to have treatment for IUA if I do not have many symptoms?
- What are my options if I want to become pregnant?

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