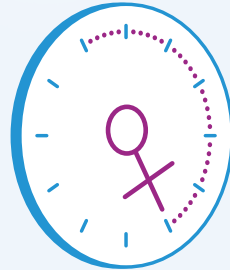


minerva™
The Uterine Health Company

AUB & Fertility



**While the clock ticks, fibroids and polyps grow.
Learn how Abnormal Uterine Bleeding (AUB)
caused by fibroids and polyps can impact your
ability to get pregnant.**

A guide to diagnosis and incision-free treatment of polyps and fibroids

Tick, tock...AUB?

Conversations about fertility often center on the ticking clock: women's ages and their finite supply of healthy eggs.

But as women age and the number of viable eggs drops, the reported incidences of **AUB** (**Abnormal Uterine Bleeding**) rise.¹

Let's start with a few definitions and symptoms:

Types of infertility

Subfertility—the inability to conceive naturally within a time period of less than one year

Infertility—the inability to conceive naturally after one year of trying

Primary infertility—women who have not become pregnant after at least 1 year having sex without using birth control methods

Secondary infertility—women who have been able to get pregnant at least once, but now are unable

Symptoms of AUB

heavy bleeding

pressure on bowel and bladder

constipation

infertility

pain during sex

extreme fatigue

pain in back and legs

depression

anxiety

social fears around bleeding in public

problems sleeping

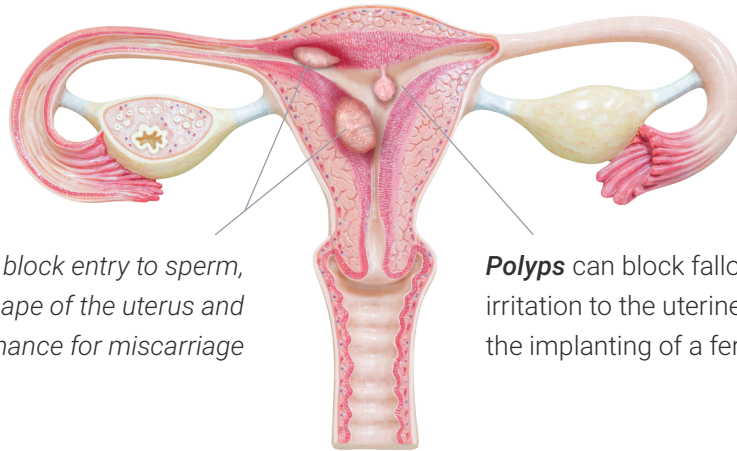
intimacy issues

anemia

If you're experiencing recurrent miscarriages or suspect an infertility condition, and you have symptoms of AUB, a consultation with a fertility specialist will help determine if AUB is a contributing factor.

How can AUB affect fertility?

Two common causes of AUB that can affect a woman's ability to become pregnant and maintain a healthy pregnancy are polyps and fibroids.²



Fibroids can block entry to sperm, alter the shape of the uterus and increase the chance for miscarriage

Polyps can block fallopian tubes, cause irritation to the uterine wall and impede the implanting of a fertilized egg

Fibroids

Fibroids are dense growths and can be within the muscular walls of the uterus, outside the uterine cavity, or grow into the uterine cavity. Women may have one or many, and in some cases they can fill the uterine cavity. Fibroids are very rarely cancerous, but they can significantly impact the ability to get pregnant and carry a pregnancy to term.

How fibroids impact fertility⁵

Alters the shape of the uterine cavity, affecting the number of sperm that can enter and their ability to move

Affects blood flow to the uterine cavity, decreasing the ability of an embryo to implant to the uterine wall

Changes the position of a baby in the uterus, increasing the risk for miscarriage, preterm delivery, and cesarean section

Polyps

Uterine polyps are endometrial tissue growths in the uterine cavity that attach to the uterine wall. They can grow to the size of a golf ball or larger and fill the uterine cavity. Women can have one or many. Most polyps are non-cancerous, but polyps can become cancerous.³

How polyps affect the uterine cavity⁴

Causes irritation of the uterine lining, interfering with implantation of an embryo

Induces local inflammatory changes or distorts the uterine cavity

Blocks the cervical canal or entrance into the fallopian tube

Endometrial polyps also appear to be the most commonly detected abnormality (16.7 %) in patients with recurrent implantation failures after in-vitro fertilization (IVF).⁴

Polyps

Hysteroscopic removal of polyps and fibroids improves a woman's ability to get pregnant⁶, and in most cases normalizes AUB. Symphion[®] enables the fast and safe removal of any tissue present in the uterine cavity, while protecting the integrity of the uterine wall.

How to treat polyps

Removal (polypectomy) with Symphion Operative Hysteroscopy System

A polypectomy is a minimally invasive treatment that preserves the uterus, while removing the polyp.

Symphion enables the physician to safely and completely remove the polyp under direct visualization of your uterus via a hysteroscope.

Symphion's advanced plasma technology is precise and replaces forceps and graspers, eliminating the need for tugging or pulling out a polyp. This contributes to the preservation of the integrity of the uterine wall. That's important, because the uterine wall is where a fertilized egg will attempt to implant.

According to The American Association of Gynecologic Laparoscopists (AAGL)

"Due to the possible effect of endometrial polyps on fertility, their removal prior to any subfertility treatment is widely practiced. Removal without the aid of direct visualization should be avoided due to its low sensitivity and negative predictive value of successful removal compared to hysteroscopic polypectomy."

AUB and pregnancy after polypectomy⁷

In a study of 83 women under 35 years old with 12+ months of infertility and 3-8 months of AUB:

100% had polyps or multiple polyps **52** had polyps larger than 1cm

Following polypectomy

91.6% AUB was normalized **61.4%** conceived spontaneously



Fibroids

With Symphion's advanced plasma technology, physicians are able to remove large fibroids with precision, in one treatment.

How to treat fibroids

Removal (myomectomy) with Symphion Operative Hysteroscopy System

Symphion (*image on right*) enables the physician to safely and completely remove fibroids, while preserving your uterus under direct visualization via a hysteroscope. Symphion **eliminates** the need for incisions and does not use blades or a morcellator.

Instead, advanced plasma technology quickly removes the dense, fibrous tissue from the uterine cavity via the slim wand tip. All tissue is captured for analysis and the integrity of the uterine wall is preserved.

Physicians prefer Symphion because of its plasma technology, precision, and multiple advanced safety features.

If you are experiencing difficulty getting pregnant or maintaining a pregnancy, see a fertility specialist or a gynecologist who understands AUB. The root cause of your issue may be polyps or fibroids. Today, polyps and fibroids can be safely removed from your uterus with Symphion.



For more information or to locate a physician, please visit our website aubandme.com



¹ Clevenger-Hoeft M, Syrop CH, Stovall DW, Van Voorhis BJ. Sonohysterography in premenopausal women with and without abnormal bleeding. *Obstet Gynecol.* 1999 Oct;94(4):516-20. doi: 10.1016/s0029-7844(99)00345-2. PMID: 10511351.

² Whitaker L, Critchley HO. Abnormal uterine bleeding. *Best Pract Res Clin Obstet Gynaecol.* 2016;34:54-65. doi:10.1016/j.bpobgyn.2015.11.012

³ <https://www.mayoclinic.org/diseases-conditions/uterine-polyps/symptoms-causes/syc-20378709>

⁴ Nijkang NP, Anderson L, Markham R, Manconi F. Endometrial polyps: Pathogenesis, sequelae and treatment. *SAGE Open Med.* 2019;7:2050312119848247. Published 2019 May 2. doi:10.1177/2050312119848247

⁵ <https://www.reproductivefacts.org/news-and-publications/patient-fact-sheets-and-booklets/documents/fact-sheets-and-info-booklets/fibroids-and-fertility/>

⁶ Bosteels J, Kasius J, Weyers S, Broekmans FJ, Mol BW, D'Hooghe TM. Hysteroscopy for treating subfertility associated with suspected major uterine cavity abnormalities. *Cochrane Database Syst Rev.* 2015 Feb 21;(2):CD009461. doi: 10.1002/14651858.CD009461.pub3. Update in: *Cochrane Database Syst Rev.* 2018 Dec 05;12:CD009461. PMID: 25701429.

⁷ Stamatellos I, Apostolides A, Stamatopoulos P, Bontis J. Pregnancy rates after hysteroscopic polypectomy depending on the size or number of the polyps. *Arch Gynecol Obstet.* 2008 May;277(5):395-9. doi: 10.1007/s00404-007-0460-z. Epub 2007 Sep 13. PMID: 17851673.



We are The Uterine Health Company

Minerva designs and manufactures minimally invasive, technologically advanced devices for the modern treatment of Abnormal Uterine Bleeding (AUB). These devices treat the common root causes of AUB while preserving the uterus.

minerva^{ES}
Endometrial Ablation System

SYMPHION[®]
Operative Hysteroscopy System

Genesys[®] HTA
Endometrial Ablation System

resectr[™]
Tissue Resection Device

Minerva Surgical does not provide medical diagnosis, treatment or engage in the practice of medicine. There are potential risks with any medical procedure. These procedures may not be appropriate for all patients, and all patients may not benefit. For information about risks, visit aubandme.com/risks. Rx Only.