

Hemi-uterus

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

What is a Hemi-uterus?

A hemi-uterus, or “unicornuate” uterus is a type of structural difference in the configuration of the uterus, due to a partial or total failure of development of structures forming the uterus in early embryological life.

In addition to the difference in the external contour of the uterus (it may be “banana-shaped”, for instance), a second, smaller rudimentary piece of the uterus (called a “horn”) may develop alongside the hemi-uterus because of partial development which may or may not have a functional lining (the endometrium).

How does a hemi-uterus happen?

A hemi-uterus, also called unicornuate uterus, accounts for approximately 20% of all developmental structural differences in configuration of the uterus. During early development of the embryo, between the sixth and eight weeks of pregnancy, the uterus develops. Interruptions to the normal process of development during this time can result in differences in structure of the uterus, such as hemi-uterus.

How is hemi-uterus diagnosed?

The initial diagnostic tool is transvaginal ultrasound. Its reported accuracy rates range from 90% to 92%. Another popular modality is MRI, despite its high cost, which has shown accuracy rates of 96–100%. Without any potentially harmful invasive intervention, a three-dimensional (3D) ultrasound and MRI can provide a better evaluation of the exterior contour of the uterus and the lining of the cavity of the uterus. The additional diagnostic techniques include laparoscopy, hysteroscopy, and hysterosalpingography which are more invasive procedures.

What are the possible complications?

A hemi-uterus has been found to have the lowest pregnancy survival rate of any developmental uterine anomaly. The estimated live birth rate is only 50%. Preterm labor is claimed to happen 20% of the time, spontaneous abortion 34% of the time, and intrauterine death 10% of the time.

What are the management options?

There may or may not be communication between the rudimentary horn on the opposite side and the endometrial cavity of the hemi-uterus. If these chambers do not connect and the lining of the smaller, rudimentary horn is functional, backward flow of menstrual blood can occur into the abdomen. This is called “retrograde menstruation”. If this occurs, endometriosis may eventually develop as a result of this. Other complications like ectopic pregnancy, that is, pregnancy occurring outside the uterus, may also occur. Surgery is typically advised to remove the smaller, rudimentary horn because of these potential concerns.

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