This leaflet is to help you understand what ovarian ectopic pregnancy is, how ovarian ectopic pregnancy happens, what the symptoms are, and the recurrence for the next pregnancy.

What is an ovarian ectopic pregnancy?

Normally, the gestational sac is implanted in the endometrial cavity. An ectopic pregnancy is characterized by implantation and development of an embryo outside of the uterine cavity. Ovarian ectopic pregnancy occurs when a fertilized egg implants on the surface of the ovary.

How does an ovarian ectopic pregnancy happen?

The exact etiology and pathogenesis of ovarian ectopic pregnancy are still unknown. It is hypothesized that due to ovulatory dysfunction, the egg is fertilized while still within the follicle. Most OEP seem to be secondary due to the reflux of a fertilized ovum from the fallopian tube to the ovary. There seems to be an especially strong association of ovarian pregnancies with intrauterine devices. The theory behind this is that although the IUD provides protection from intrauterine implantation, it does not prevent ovarian implantation. Assisted reproductive techniques is also related to the increased ovarian ectopic pregnancy’s incidence like ectopic pregnancies in other locations.

What are the symptoms of an ovarian ectopic pregnancy?

Symptoms can be overlapped with tubal ectopic pregnancies and may include a combination of the following signs:

- Amenorrhoea (absence of menstrual period) is a common symptom. However, in some cases, abnormal bleeding is mistaken as a menstrual period, so you will think there is no history of abnormal bleeding.
- Vaginal bleeding: The bleeding may resemble spotting or be prolonged or intermittent.
- Lower abdominal pain: Ectopic pregnancy pain is often located on one side of the body; the area may be tender to the touch, or the pain may be severe.
- Some women may present with gastrointestinal symptoms (e.g. nausea and vomiting) so the suspected clinical diagnosis might be gastroenteritis rather than ectopic pregnancy.

How is an ovarian ectopic pregnancy diagnosed?

Transvaginal ultrasound scan (TVS) is the primary diagnostic tool of all ectopic pregnancies. With this type of ultrasound, a device called a transducer is placed in your vagina. A transvaginal ultrasound allows your doctor to see the exact location of your pregnancy. However, early and exact diagnosis is challenging because an ovarian pregnancy can be misdiagnosed as a hemorrhagic ovarian cyst or corpus luteum.
Your doctor may also ask you to have a blood test (called human chorionic gonadotropin or β-hCG) to confirm that you’re pregnant. A suboptimal rise in this pregnancy hormone over a few days can suggest the diagnosis of an ectopic pregnancy but does not help to confirm the diagnosis of an ovarian pregnancy. Sometimes, this blood test may also be repeated every few days until ultrasound testing can confirm or rule out an ovarian ectopic pregnancy.

What are the things to watch for?

If left untreated, the ectopic pregnancy continues to grow, rupture and causing an acute abdominal hemorrhage. Ovarian pregnancies usually terminate in rupture during the first trimester in 91% of the cases. It is therefore important that if you experience severe abdominal pain or any other worrying symptoms that you should go to the nearest emergency department immediately.

What are the treatment options?

To prevent life-threatening complications, the ovarian ectopic pregnancy needs to be removed or ceased immediately after detection. Depending on your symptoms and desire for future pregnancy, the serum β-HCG levels and whether the ovarian ectopic pregnancy is live or not, your doctor will recommend medical treatment with drugs or surgical procedures. Surgical interventions have both a diagnostic and a therapeutic value, so it's recommended as the first-line option.

Will it happen again?
Risk of recurrence is extremely low. However, women with risk factors of ovarian ectopic pregnancy should visit for an early ultrasound scan in all future pregnancies to exclude the recurrence.

What other questions should I ask?

- When is my next follow-up appointment?
- What are my chances of having a healthy pregnancy in the future?
- How long should I wait before trying to become pregnant again?
- Will I need to follow any special precautions if I become pregnant again?