Premature Ovarian Insufficiency (POI)

What is Premature Ovarian Insufficiency (POI)?

When someone's ovarian reserve (egg count) becomes so low that they stop ovulating and having periods before age 40, they are said to have Premature Ovarian Insufficiency (POI). Before this happens, the ovaries may continue to intermittently (and unpredictably) ovulate, resulting in irregular menstrual cycles for months to years before they stop altogether. Once someone stops ovulating, they also stop making ovarian hormones, including estrogen and progesterone.

What are the symptoms of POI?

POI may occur suddenly with an abrupt stop to periods, or POI can come on gradually with months, or even years, of irregular cycles before periods stop. Some people with POI will have symptoms that are commonly experienced by those entering menopause such as: hot flashes, night sweats, vaginal dryness, painful intercourse, and difficulty sleeping or concentrating. But many people with POI have none of these symptoms, and difficulty getting pregnant and irregular or absent periods may be the earliest and only signs of POI.

What causes POI?

There are many different possible causes of POI. Unfortunately, in most cases, even after investigations are complete the cause is not found. Some causes include:

- **Genetic:** POI can be related to an underlying genetic condition, such as Turner Syndrome or Fragile X Syndrome. In some cases, like when POI runs in a family, the cause is likely genetic, but the exact genetic mutation may be unknown.
- **Autoimmune:** POI can be due to an autoimmune disorder that affects the ovaries. This often occurs with other autoimmune disorders, such as those affecting the thyroid or the adrenal glands.
- **latrogenic:** POI can be due to a history of medical treatment that is known to damage the ovaries, such as chemotherapy and radiation therapy, or surgical removal of the whole or parts of ovaries.

Can I get pregnant with POI?

Although approximately 5% of people with POI may conceive spontaneously over their reproductive years, fertility rates each month are extremely low and individual fertility rates are difficult to predict. Unfortunately, fertility treatment options that rely on using your own eggs are not able to increase pregnancy rates above what they are without treatment. Fertility treatments using eggs from someone else (donor eggs) are very successful in allowing people with POI to become pregnant, carry a pregnancy to term, and deliver a healthy baby.



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How is POI treated?

There are no known ways to reverse POI or to get the ovaries to make new eggs. For people wanting to conceive, donor eggs offer the best chances of success. Everyone with POI is at risk of long-term health effects of chronically low estrogen levels, including osteoporosis and cardiovascular disease. For this reason, it is important that people with POI (who are not in a fertility treatment cycle or pregnant) start hormone therapy and continue it until approximately age 51, which is the average age of menopause.

* Adapted from the ASRM What is premature ovarian insufficiency Fact Sheet