



PATIENT RESOURCES

# Primary Ovarian Insufficiency

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Primary ovarian insufficiency (POI), also called premature ovarian failure, occurs when the ovaries have a decrease in **estrogen** production and ovulation before a woman turns 40. The condition often leads to **infertility**.

## Endocrine Connection

In most cases, the cause of POI is unknown. Women with certain genetic disorders, such as Turner syndrome and fragile X premutation carriers, are more likely to develop POI. Also, exposure to chemotherapy and radiation therapy can lead to POI. Last, autoimmune disease—when your immune system attacks your ovarian tissue—may be responsible for POI. The risk of developing POI increases if you have a family history of the disorder.

### ► **Diagnosis and Prevention**

If you are younger than 40 and have stopped having periods or are having irregular ones, talk with your doctor to find the cause of the problem. Your doctor will ask about your menstrual history and any menopause-like symptoms you may be having. Blood tests will be done to check hormone levels and determine if your ovaries are working properly. Additional tests should also be done to check for possible genetic or autoimmune conditions that may be related to the ovarian insufficiency.

### ► **Symptoms and Risk Factors**

The most common sign of POI is irregular or missed menstrual periods. Periods may occur off and on, or may start again many years after POI is diagnosed. Due to the drop in estrogen levels, women with POI may also have menopause-like symptoms, including:

- › Night sweats
- › Hot flashes
- › Vaginal dryness

- › Irritability, depression, or anxiety
- › Trouble sleeping
- › Trouble with concentration or memory

Because women with POI have low levels of estrogen at a young age, several health problems are more common than in women without POI:

- › **Infertility:** Most women with POI cannot get pregnant naturally. They often can carry a pregnancy but most need to use donor eggs.
- › **Osteoporosis:** Low levels of estrogen increase the risk of bone loss and fractures.
- › **Heart Disease:** Low estrogen early in life appears to increase the risk of heart attack as a woman ages.
- › **Depression:** Many women with POI feel sadness about their unexpected loss of ovarian function. Women with POI should talk about these feelings with their medical provider and may want to talk to a therapist.

If you have POI, you may also be more likely to develop other hormone-related disorders. Women with POI should be checked periodically for deficiencies in thyroid and adrenal gland hormones.

### ► **Treatment and Therapies**

Treatment depends on whether you have symptoms or are at risk for serious health problems. Hormone therapy (HT) is the most common treatment. HT combines estrogen and progesterone, another sex hormone. HT relieves menopausal symptoms and also helps prevent osteoporosis. HT can be taken as a pill or applied to your skin as a patch. Vaginal rings can also supply estrogen to the body.

In older, postmenopausal women, HT may increase risk of breast cancer, heart disease, and stroke. In younger women with POI, these risks are thought to be much lower, since it's normal for women in this age group to have higher estrogen levels. Usually, HT is stopped when a woman with POI reaches the age of natural menopause (around age 50).

If you cannot or do not want to take HT, you might benefit from non-hormonal treatments. In addition to medical treatment, you can lower your risk of osteoporosis and heart disease by eating a healthy diet and exercising regularly.

#### ► **Questions to Ask Your Healthcare Provider**

- › Do I need any genetic testing or autoimmune testing?
  - › What are my treatment options?
  - › What are the advantages and disadvantages of each of my treatment options?
  - › What else can I do to stay healthy?
  - › Should I see an endocrinologist and/or fertility specialist for my diagnosis?
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