

# Ovarian dermoid cysts - Mature Cystic Teratomas

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

## **What are dermoid cysts/mature cystic teratomas?**

Ovarian dermoid cysts or mature cystic teratomas are benign ovarian masses arising from germ cells. These cells can generate any type of mature tissue. They can contain hair, sweat glands, teeth and brain tissue (so called ectodermal structures), muscle fibers, cartilage, bone and fatty tissue (so called mesodermal structures) and thyroid, respiratory and gastrointestinal tissue (so called endodermal structures).

## **How do dermoid cysts come into existence?**

Genetic studies have shown that dermoid cysts grow from a single unfertilized oocyte (immature egg cell). This oocyte repetitively multiplies and divides into a multitude of cells that have the same genetic contents as the unfertilized oocyte. These cells can transform into any possible cell of the body.

## **What are the risks of having a dermoid cyst?**

Dermoid cysts can cause pelvic discomfort because of mass effects, torsion (twisting) or cyst rupture. With increasing size, risks of cyst rupture and torsion rise.

Even though dermoid cysts are almost always benign, clinical and ultrasound evaluation are important for correct diagnosis and during follow-up. Follow-up is performed to monitor growth and to detect signs of malignant transformation. Malignant transformation is very rare.

In some extremely rare cases, some blood and neurologic diseases can occur because of substances released in the bloodstream by ovarian teratomas.

## **Should it be removed?**

For children and women of childbearing age who do not experience any discomfort from the cyst, watchful waiting is a safe and good option.

If the patient experiences discomfort or feels insecure, the gynecologist can opt to remove the cyst whilst sparing the surrounding normal ovarian tissue. In some situations, however, removal of the whole ovary with the tube may be more appropriate, for example in older patients or if the cyst is very large. A spill of cyst content at surgery may result in painful inflammation of the inner lining of the abdomen.

## **Will it happen again?**

Recurrence after surgery has been documented in up to 7.6% of cases.

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## **What other questions should I ask?**

- Can this ovarian cyst be followed up?
- What are the warning signs I should be aware of in case of follow-up?
- Does this cyst need to be removed?
- How drastic is the surgery that will be performed?
- Will the one performing surgery be a general or oncological gynecological surgeon?
- What risks does an operation bring?

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