Granulosa cell tumor

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

What is it?
The granulosa cell tumors are a rare ovarian cancer hisotype characterized by long natural history and favorable prognosis. The median age of the patients was 50 years.

There are two types of granulosa cell tumor:

- adult-type granulosa cell tumor (2-4% of all ovarian cancers)
- juvenile type granulosa cell tumor (patients under 30 years old)

A juvenile granulosa cell tumor can be more likely relapse than an adult form within a few years and be more aggressive.

The ovarian lesion produces estrogens; an estrogen-dependent endometrial pathology (polyp, hyperplasia or cancer) can be found in association with granulosa ovarian tumor in a fair percentage of patients.

Which are the symptoms?
20% of the patients are asymptomatic at diagnosis.

Usually described symptoms are:

- increased abdomen size (a swollen belly),
- abdominal pain
- vaginal bleeding and amenorrhea in premenopausal women
- breast tenderness

How could it be diagnosed?
The first diagnostic approach is transvaginal ultrasound, possibly supplemented by transabdominal evaluation. A chest-abdomen-pelvis CT scan is requested to complete the staging. The dosage of blood tumor markers such as estradiol, anti-mullerian hormone and Inibin-B is recommended.

How can this condition be treated?
Surgery is the mainstay of treatment. In young women with an early-stage disease, a fertility sparing surgery is feasible (surgical resection of the ovarian lesion or unilateral salpingo-oophorectomy). Endometrial biopsy should always be performed in patients who undergo conservative surgery. In postmenopausal women or in patients who do not wish to preserve fertility, demolitive surgery (hysterectomy, bilateral adnexectomy, peritoneal biopsies, omentectomy, washing) is the standard of care.

Which is the prognosis?
Most tumors are diagnosed at an early stage and usually show a better prognosis than patients with other types of ovarian cancer. The estimated 5- and 10-year overall survival is about 85% and 73%, respectively.

Which follow-up will I need?
A long follow-up is advised because there is a possibility of late recurrence.

Regular pelvic examination, imaging (usually transvaginal and transabdominal ultrasound alternating with CT scan) and serum markers such as AMH, inhibin B and estradiol are advised every 3 months for the first year, every 4 months from the second to fifth year, and every 6 months after the fifth year.

What other questions should I ask?

- Are there problems for future fertility after surgery?

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