Brenner tumor

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

What is it?

Brenner tumor is a rare tumor that originates from the surface of the ovary. Most tumors are benign or borderline with malignant tumors accounting for less than 5% of cases. Benign Brenner tumor is typically a small solid lesion measuring 2-8 cm in diameter. Borderline and malignant Brenner tumors are typically larger, measuring up to 30 cm. The benign form can be diagnosed at any age, but it is usually assessed in women aged 30-70 years while borderline or malignant forms are usually diagnosed in women aged 45-65 years old. The long-term prognosis of benign Brenner tumors is good. Because of the rarity of malignant Brenner tumors, there is little information on the prognosis and long-term survival of women with this condition.

Which are the symptoms?

In most cases, Brenner tumors are asymptomatic and they can be diagnosed incidentally during examination, imaging or surgery for another indication. The most frequent clinical symptoms at presentation are vaginal bleeding and lower abdominal pain; other symptoms are ascites or pleural effusion (Meigs' syndrome), abdominal distension and urinary retention. The most frequent clinical findings are a palpable pelvic and/or abdominal mass.

How could it be diagnosed?

An initial evaluation including complete physical examination and pelvic ultrasound is recommended.

The definitive diagnosis requires histological examination after surgery. Further imaging such as CT scan, MRI PET scan and biopsies could be necessary to stage the tumor and evaluate the subsequent correct treatment. There is not a diagnostic tumor marker for this condition.

How can this condition be treated?

Benign, borderline and malignant Brenner tumors are all treated with surgical resection. Borderline and malignant forms need an appropriate surgical staging. Malignant forms are rare; there is not a standard adjuvant treatment due to the rarity of this condition. Malignant Brenner tumor can potentially spread within the abdominal cavity. Metastases could also be seen in the pleura, lung, kidneys, liver, urinary bladder and skeleton.

Which follow-up will I need?

Due to the rarity of Brenner tumors, a follow up has not been standardized. In our experience, we suggest performing a general physical and pelvic examination every 6 months for 5 years, then annually. Patients with advanced-stage disease at presentation, who achieve and maintain a complete response, should be followed life-time.

What other questions should I ask?

- Are there problems for future fertility after conservative surgery for benign or borderline disease?
- Can the tumor relapse after surgery?

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