

BRIEF REPORT

Bilateral Multiple Cystic Teratomas of Ovaries

Cystic teratomas make up approximately 15% to 25% of ovarian neoplasms; 10% to 15% are bilateral and are composed of well-differentiated derivatives of three germ layers—ectoderm, mesoderm and endoderm.^{1,2}

Herein, we report on a 26-year-old female with bilateral multiple cystic teratoma of Ovaries. Cystic teratoma is not uncommon but bilateral dermoid cyst is rare and we found only few reports on it.

The patient came from a rural area in Gorgan, one of northern cities of Iran. She was referred to our Gynecology Clinic with the chief complaint of abdominal pain. Physical examination revealed a large abdominal mass in midline that was tender; Blood tests and intravenous pyelography (IVP) were normal.

In sonographic evaluation, uterus was normal in size. Left ovary showed two cysts 60 and 25 mm in diameter, respectively; in the right ovary, there was one cyst 120 mm in diameter. Sonographic diagnosis was probable multiple cystic teratomas (Fig. 1).

She was admitted to Gynecology Ward for laparotomy. At operation, her left ovary had a large torsioned cyst; the right ovary had two cysts. All cysts were resected.

The histopathologic report revealed three dermoid cysts containing hair and adipose tissue.

Mature cystic teratomas, often referred to as dermoid cysts, are the most common germ cell tumors of

the ovary in women of reproductive age and are usually asymptomatic until they reach considerable size. Although these tumors are common in reproductive age, they can occur at any age including postmenopausal women.³ Our patient had three dermoid cysts in her ovaries—two in the right and one in the left.

Clinically, benign cystic teratoma presents in young women either as a asymptomatic mass or in association with symptoms of torsion or other complications such as rupture, infection, hemolytic anemia, and malignant degeneration.

Torsion is by far the most significant cause of morbidity, occurring in 3.2–16% of cases. Rupture of a cystic teratoma is rare and may be spontaneous or associated with torsion and occurs in approximately 1–4% of patients. Rupture may occur suddenly, leading to shock or hemorrhage with acute chemical peritonitis. Infection is uncommon and occurs in only 1% of cases. Autoimmune hemolytic anemia has been reported in association with mature cystic teratomas in rare cases; removal of the tumor resulted in complete resolution of symptoms. In this context, radiologic imaging of the pelvis may be indicated in cases of refractory hemolytic anemia. In its pure form, mature cystic teratoma of the ovary is always benign, but in approximately 0.1–2% of instances, it may undergo malignant transformation into one of its elements. The prognosis appears to be somewhat better

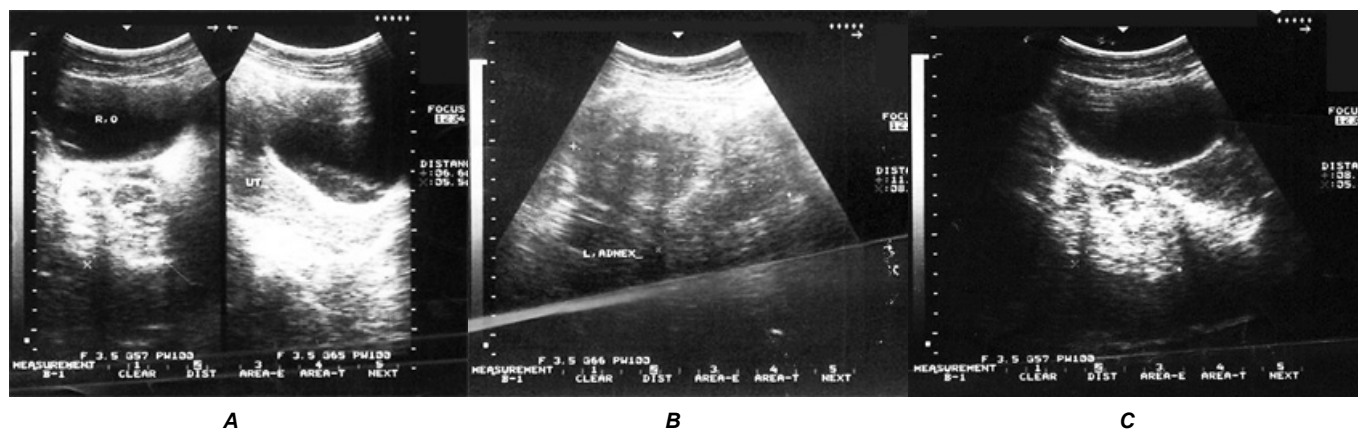


Fig. 1. A, Right ovary, normal size uterus; B, Left ovary with a large cyst; C, Right ovary with two cysts

if the malignant element is squamous rather than adenocarcinoma.^{3,4}

Sonographically, cystic teratomas have a variable appearance ranging from anechoic to completely hyperechoic. Certain features are specific for cystic teratomas like predominantly cystic mass with echogenic mural nodule called "dermoid plug." The dermoid plug contains hair, teeth or fat and frequently, causes acoustic shadow. Fat-fluid level is also highly specific. Multiple linear hyperechogenic interfaces may be seen floating within cyst because of hair fibers and is called as "dermod mesh" sign. The increased resolution capabilities provided by transvaginal sonography allow incidental detection of previously unsuspected dermoids and permit identification of their nature.^{5,6}

Dermoid cysts of ovary are devoid of blood flow with flow detection rate being only 24.3% from the cyst capsule. When apparently vascularized solid tissue is detected in central part of a sonographically suspected benign cystic teratoma, struma ovarii is highly suspected.⁷ Magnetic resonance imaging findings can help to diagnosis the malignant characteristics of teratoma.⁸

Endometriosis co-existing with bilateral dermoid cysts of the ovaries is a rare occurrence although both benign conditions are said to be common in women in reproductive age group.⁹ This association has a clinical relevance because an endometriotic patholo-

gy can reveal a silent teratoma with bilateral ovarian localization.

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