Sclerosing stromal tumor of the ovary: a case report

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Summary

A case of a rarely occurring ovarian tumor, sclerosing stromal tumor of the ovary, in an 11-year-old girl treated laparoscopically is described.

Key words: Sclerosing stromal tumor; Ovary; Child.

Introduction

Sclerosing stromal tumor (SST) of the ovary is a rare benign neoplasm, originally described by Chalvardjian and Scully in 1973 [1]. Unlike other sex-cord stromal tumors of the ovary, which tend to occur in the fifth and sixth decades, SST of the ovary predominantly affects young women. Only two affected patients have been reported in children less than 14 years old [2, 3].

We present a case of SST of the ovary in a 11-year-old girl, third youngest patient reported in the literature to date.

Case Report

An 11-year-old postmenarchal girl first presented to her pediatrician with groin pain. On sonographic examination she was reported to have an uniloculated cystic mass of the left ovary, and was referred to our clinic for further evaluation. She had a history of sharp left groin pain which had woken her up that morning. She had no fever, malaise, weight loss, gastrointestinal or urinary symptoms. Her past medical history was unremarkable, and her family history did not show familial cancer. She denied any present or past medications. Physical examination revealed tenderness and rebound tenderness of the abdomen, with no palpable mass. The patient was Tanner III without evidence of virilization.

Ultrasonography demostrated a left adnexal cyst measuring 65 x 37 x 40 mm with an 11 mm capsular thickness. Her uterus and right ovary were normal in sonographic appearance, but covered with peritoneal fluid, and the left ovary could not be demonstrated.

The patient underwent laparoscopy. The cul-de-sac was filled with haemorrhagic serous fluid. Her uterus, right ovary and both Fallopian tubes were unremarkable. There were no adhesions in the pelvis or masses in the liver, spleen, or peritoneum. The cyst originating from the left ovary was ruptured, and the cystic space was filled with blood clots. The cyst capsule was completely excised and sent for frozen section. Microscopic analysis was benign stromal tumor.

The excised cyst was composed of shiny white membranous tissue with scattered areas of hemorrhage. Microscopically the tumor showed a pseudolobular pattern in which cellular nodules were separated by less cellular areas of edematous connective tissue. There were areas of sclerosis within the nodules, prominent thin-walled vessels in some of the nodules, and a disorganized admixture of fibroblasts and rounded and vacuolated cells within the nodules (Figure 1). Mitoses were rare. No cytologic evidence of malignancy was seen.

The postsurgical recovery was uneventful, and the patient was discharged on the following day. She has been examined regularly for three years with no evidence of recurrence.

Discussion

SST of the ovary is a subtype of sex-cord stromal tumors, which has been reported to be benign and unilateral in nature [1]. However two cases of bilateral SST of the ovary have been reported [3, 4]. These ovarian tumors can be distinguished clinically by their early age of presentation. This report of an 11-year-old girl with SST follows two other cases describing a 10-year-old female with unilateral SST [2] and an 11-year-old with bilateral SST [3].

Most SSTs of the ovary are hormonally inactive, and they were originally considered to be nonfunctional tumors [1], but some investigaters have described endocrine alterations caused by secretion of steroid hor-

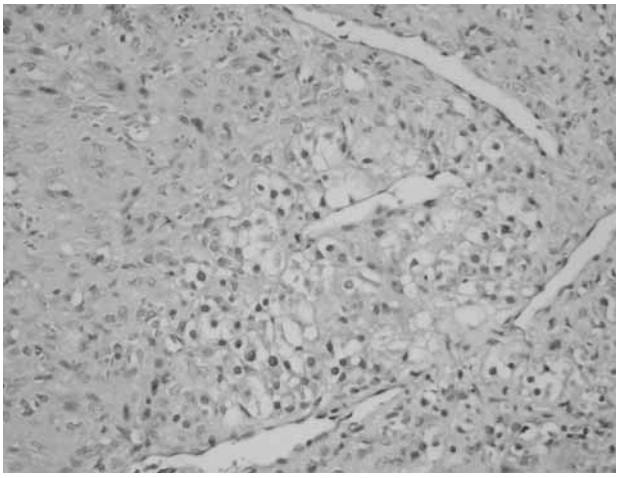

Figure 1. — Spindle cells mixed with large vacuolated cells in highly vascularized pseudolobules.

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mones [5, 6]. Being an emergent case, our patient was not investigated hormonally, nevertheless, she did not display any signs of virilization. Symptoms usually present with a pelvic tumor such as pelvic pain, a palpable pelvic mass, and menstrual irregularities were absent in our patient.

SSTs of the ovary are benign and can be successfully treated by surgical removal, and no local or distant recurrences have beeen reported [1]. Because ovarian malignancies are uncommon in the pediatric population, a cystectomy should be appropriately considered in any suspected ovarian lesion with particular effort to preserve future fertility. Biopsy of a normal appearing controlateral ovary would not be indicated because of the rarity of bilateral SSTs of the ovary.

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