



## Sonographic Suspicion of Ovarian Borderline Serous Tumor. About a Case

Rocher Cruces SA<sup>1,2\*</sup>, Gurrea Almela E<sup>3</sup>, Gracia Laborda MR<sup>1,2</sup>, Egea Prefasi L<sup>2</sup>, Abril Alcobas C<sup>2</sup> and Machado Linde F

<sup>1</sup>Department of Gynecology, Reina Sofía General Hospital, Murcia, Spain

<sup>2</sup>Department of Gynecology and Obstetrics, Virgen de la Arrixaca University Hospital, Murcia, Spain

<sup>3</sup>Department of Gynecology and Obstetrics, Clinic University Hospital, Valencia, Spain

### Abstract

A 30-year-old patient who attends a routine medical check-up is diagnosed with a suspicious cyst on the left ovary. Tumoral markers and MRI scan dismissed malignancy but due to the sonographic characteristics of the sonographic image, left adnexectomy and a staging surgery was performed. Final diagnosis is a borderline serous ovarian tumor.

During the follow-up some changes similar to those happened on the left cyst started to appear at the contralateral ovary. So, right adnexectomy is performed and again, a contralateral borderline serous tumor is found.

Ultrasound in hands of an expert sonographer is key to assess the benign or malignant nature of adnexal masses.

**Keywords:** Borderline; GIRADS; Cancer; Ovary

### Introduction

A 30-year-old patient with findings suspicious for borderline ovarian tumor in a routine ultrasound image review.

### Clinical Case

Patient who attends a gynecological check-up with a normal physical examination and cytology. Transvaginal ultrasound revealed an anteverted uterus with homogeneous myometrium and symmetrical walls. In the right ovary, a homogeneous image of doubtful endometriotic etiology was observed [1].

The left ovary presented a unilocular cyst measuring 24 mm × 18 mm × 14 mm with papillary projections greater than 3 mm, and at least 3 of them with central vascularization Doppler score 2 [2]. Existence of healthy parenchyma with a positive growing ovary sign. GIRADS 4 [3].

Given the suspicion of a borderline tumor, an MRI and tumor markers are requested. The MRI is not conclusive of malignancy and describes a cystic lesion with hemorrhagic content. Tumor markers were normal [4]. Given the persistence of the image after 4 months of follow-up, it was decided to perform an exploratory laparoscopy, finding excrescences on the surface of the ovary whose pathological anatomy shows a serous borderline ovarian tumor. Left adnexectomy and subsequent staging surgery are performed [5].

The CT that was performed in the follow-up after surgery did not show any suspicious image in the contralateral ovary either. However, given incipient ultrasound changes similar to the ultrasound image of the left ovary, oocyte vitrification and right adnexectomy were decided. Pathology study confirmed a contralateral borderline serous tumor.

### Discussion

The differentiation of ovarian masses through ultrasound plays an important role in the prognosis, management and surgical treatment. The case presented shows how, although markers and other imaging techniques seemed normal, it was the ultrasound suspicion which led to the adoption of a surgical approach (Figures 1-3).

### OPEN ACCESS

#### \*Correspondence:

Rocher Cruces SA, Department of Gynecology and Obstetrics, Virgen de la Arrixaca University Hospital, Actors Camps, Mas i Montroy Street, n 34, 46950, Xirivella, Valencia, Spain, Tel: +34-687 250 436;

E-mail: sandraginobs@gmail.com

**Received Date:** 03 Nov 2022

**Accepted Date:** 17 Nov 2022

**Published Date:** 21 Nov 2022

#### Citation:

Rocher Cruces SA, Gurrea Almela E, Gracia Laborda MR, Egea Prefasi L, Abril Alcobas C, Machado Linde F. Sonographic Suspicion of Ovarian Borderline Serous Tumor. About a Case. *Clin Case Rep Int.* 2022; 6: 1423.

**Copyright** © 2022 Rocher Cruces SA. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

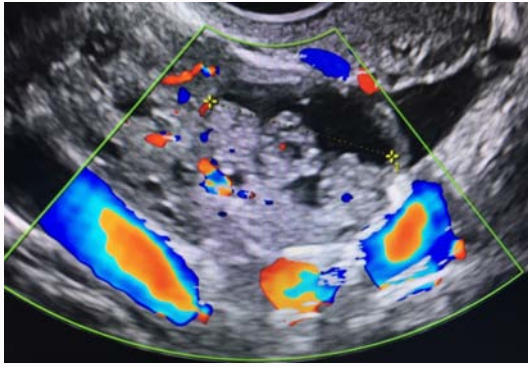


Figure 1: Borderline serous tumor on the left ovary.

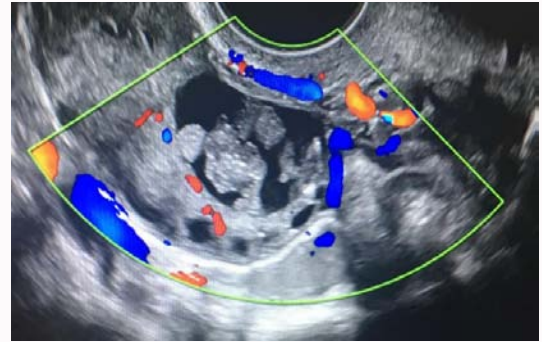


Figure 3: Borderline serous tumor on the right ovary.

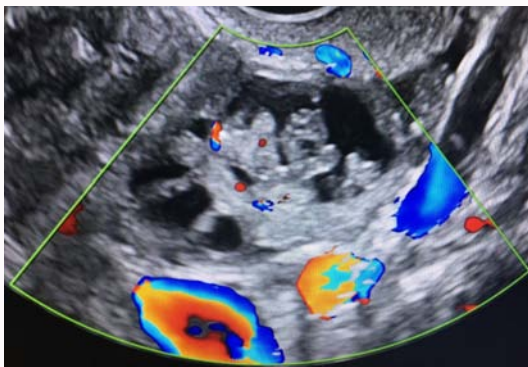


Figure 2: Borderline serous tumor on the left ovary.

### Clinical Contribution of the Case

Ultrasound in the hands of an expert sonographer is key to assess the benign or malignant nature of adnexal masses.

### References

1. Fruscella E, Testa AC, Ferrandina G, De Smet D, Van Holsbeke C, Scambia G, et al. Ultrasound features of different histopathological subtypes of borderline ovarian tumors. *Ultrasound Obstet Gynecol.* 2005;26(6):644-50.
2. Hassen K, Ghossain MA, Rousset P, Sciot C, Hugol D, Baddoura R, et al. Characterization of papillary projections in benign versus borderline and malignant ovarian masses on conventional and color Doppler ultrasound. *AJR Am J Roentgenol.* 2011;196(6):1444-9.
3. Juez L, Peces A, Martinez-Astorquiza Corral T, Orozco R, Utrilla-Layna J, Caparros M, et al. Ultrasound features for determining the risk of malignancy in unilocular-solid adnexal masses in premenopausal women without ascites and/or carcinomatosis. *Donald School J Ultrasound Obstet Gynecol.* 2015;9(2):112-7.
4. Pascual Ángela M, Tresserra F, Grases PJ, Labastida R, Dexeus S. Borderline cystic tumors of the ovary: Gray-scale and color Doppler sonographic findings. *J Clin Ultrasound.* 2002;30(2):76-82.
5. Diagnostic evaluation of adnexal masses. *Progress in Obstetrics and Gynecology (SEGO).* 2016;(56):443-9.