
Background
Ovarian cancer mortality remains high mainly due to late diagnosis. Since 1999, we have performed color Doppler transvaginal (CDTV) ultrasound to screen for ovarian cancer. The purpose of this paper is to assess the efficiency of CDTV ultrasound to detect ovarian cancer in early stages.

Methods
Screening by CDTV ultrasound was annually performed in asymptomatic women with no family history of ovarian cancer. Women with abnormal screenings had repeat tests after four to six weeks. If the finding remitted, CDTV ultrasound follow-up was performed at one year. If the abnormality persisted, the study was completed with tumor markers, CT scan, and laparoscopy.

Results
A total of 490.758 CDTV ultrasound screenings performed in 131.070 women were reviewed. Malignant tumors were diagnosed and histologically confirmed in 87 patients. Borderline lesions were detected in 39 of them (46%). The mean age of the patients was 47 years (±12). Sixty-three (74%) of these tumors were in stage I (including two cases of Fallopian tube carcinoma); four were in stage II; 18 were in stage III; and two lesions detected were metastases. Sixty-four percent of the patients had normal levels of CA 125, measured after the lesions were detected by CDTV ultrasound study.

Conclusions
Although consensus about the benefits of transvaginal ultrasound as a screening procedure is not unanimous, our data suggest that tumors in patients screened with CDTV ultrasound are detected at earlier stages. Additional randomized studies are needed to support these findings.