INTRODUCTION. Decidualized endometriosis is a benign condition associated with ectopic endometrium that suffers some important structural changes during pregnancy in order to provide an optimal pregnancy accommodation.

DESCRIPTION. A 38-year-old woman, nulliparous, who was referred to our center to perform an infertility study. In the first transvaginal ultrasound, we visualized a unilocular cyst in the left ovary of 30 x 41 x 36 mm with irregular wall and slightly hyperechogenic (score color 1). Ecogenicity of cyst fluid: mixed. The first ultrasound diagnosis was a probably atypical endometrioma and a new ultrasound control was requested in 3 months.

The patient underwent in vitro fertilization in an external center, so she came to control 5 months later, 13+6 weeks pregnant. Ultrasound showed sonographic changes in the cyst. On this occasion, the same explorer described it as unilocular-solid cyst of 26 x 29 x 36 mm, anechoic, with multiple papillary projections (>4) that were highly vascularized on Doppler examination. According to the IOTA Simple Rules, it was classified as probably malignant.

SURGERY/HISTOPATHOLOGICAL FINDINGS. A laparoscopic left adnexectomy with intraoperative anatomopathological study was proposed. Surgery was performed when the patient was 15+5 weeks pregnant, and the histological examination of the surgical piece showed an endometriotic cyst with extensive decidual changes of the stroma and the wall.

CONCLUSION. According to available literature, it is evident that decidualized endometriomas with papillary projections can cause important diagnostic difficulties, especially in women without ultrasound diagnosis of endometrioma prior to gestation, because they tend to present as a complex adnexal cystic mass, which can mimic ovarian malignancy. However, and according to published evidence, it seems reasonable to suggest expectant management of cysts with papillary projections detected during pregnancy only in patients who have had an ultrasound diagnosis prior to pregnancy of an endometrioma in the same ovary.