Objective: To evaluate the patients who underwent vaginal tru-cut biopsy in our gynecological oncology department for the management of adnexal masses resembling advanced stage ovarian carcinoma.

Methods: For this retrospective study, we reviewed the medical records of 12 patients whom underwent ultrasonography guided vaginal tru-cut biopsy in our gynecologic oncology department. Patients who have suspected ovarian malignancy but not suitable for optimal debulking surgery, who may have higher rate of morbidity and mortality because of poor performance status or suspected non gynecological tumor were the indications of ultrasonography guided vaginal biopsy.

Results: The indications for ultrasonography guided vaginal tru-cut biopsy were candidates for suboptimal cytoreduction (n=8, 66%), poor performance status (n=2, 17%), suspected non-gynecological tumor (n=2, 17%). Biopsy materials were to found be sufficient by the pathologist in 11 of 12 cases (92%). Histopathologic evaluation revealed primary ovarian tumor in 11 (%) patients. In one patient histopathologic result could not conclude any result due to inadequate material and patient underwent computed tomography (CT) guided tru-cut biopsy.

Conclusions: Ultrasonography guided vaginal tru-cut biopsy can be preferred as a minimally invasive procedure in the management of adnexal mass and may be an alternative to (CT) guided tru-cut biopsy in selected patients. Ultrasonography guided vaginal tru-cut biopsy may be performed especially in advanced ovarian cancer patients with high comorbidity who may benefit from neoadjuvant chemotherapy.