Objective
To determine the effectiveness of using a transvaginal ultrasound for ectopic pregnancy in conjunction with clinical, laboratory and endoscopic methods.

Methods
Retrospective analysis of case histories of 30 women diagnosed with an ectopic pregnancy, received in the gynecological Department of the establishment of health care Penza maternity hospital in 2013-2014.

Results
All of the 30 women who were admitted to the gynaecology department with a suspicion of an ectopic pregnancy had a positive chorionic gonadotropin in the urine. During the initial transvaginal examination the gestational sac in the uterine cavity was visual in 5 women which allowed excluding the ectopic pregnancy. The gestational sac with a living embryo (heartbeats recording) was visual in the ovary view in 2 patients suspected of having an ectopic pregnancy. A cavitary lesion with a nonhomogeneous structure and a hyperechoic ring was visual in the view of uterine appendages of 14 patients, this lesion was observed in patients suspected of having a tubal pregnancy. 8 of them had a moderate amount of the free fluid in the pouch of Douglas (a sonographic sign of the interrupted tubal pregnancy). During the transvaginal investigation 9 patients had an increase in size of the uterus, a thickened median endometrial echo, and a false gestational sac in the uterine cavity was visual only in 2 patients of these 9. During the repeated transvaginal investigation, 5 days after the first examination the gestational sac in the uterine cavity was visual in 6 patients, this investigation confirmed an intra-uterine early pregnancy. The rest 3 patients were not diagnosed with the help of a TV-ultrasound investigation, and an ectopic pregnancy was confirmed during an operation.

Conclusion
11 (36, 7%) patients were diagnosed with an intra-uterine pregnancy with the use of a TV-ultrasound investigation, 16 (53, 3%) patients were diagnosed with an ectopic pregnancy and nothing abnormal was detected in 3 (10%) patients. When an ectopic pregnancy is suspected the dynamic transvaginal ultrasound study data allows diagnosing an early intra-uterine pregnancy, a progressive ectopic pregnancy and a disturbed tubal pregnancy. It is necessary to include a TV-ultrasound investigation in the mandatory complete physical examination of patients suspected of having an ectopic pregnancy; this examination will allow reducing the study period and increasing the diagnostics informative value, and in some cases will allow avoiding a surgical intervention.