Autoimmune oophoritis is an autoimmune inflammation of ovaries resulting in self-destruction, atrophy, fibrosis with a loss of fertility function and ovarian hormonal production. The aim of the conducted study is to determine the origin of autoimmune oophoritis. For this purpose, 52 patients of reproductive age were examined. All these patients underwent uterine artery embolization (UAE) due to uterine leiomyoma.

**Methods used:** pelvic and thyroid gland USG, hormonal study of ovarian function, study of TSH, T3, T4 concentrations and detection of anti-ovarian, anti-thyrotrophic and thyroglobulin auto-antibody titers.

**Results:** Ultrasound investigation of thyroid gland did not show any decrease in size after UAE (right lobe: 4.4±0.1x1.7±0.1x2.0±0.2 sm; left lobe: 4.3±0.2x1.7±0.1x1.8±0.1 sm; volume: 13.2±0.6 ml). Also, there were no differences in concentration of TSH (2.6±0.3 Mme/L), T3 (1.8±0.2 nmol/L) and T4 (14.4±3.7 pmol/L) between the group of patients after UAE and the control cohort. In contrast, pelvic USG revealed a sharp decrease in ovarian volume (right 1.9±0.3 cm^3, left 1.8±0.3 cm^3). The hormonal study results have shown a significant increase in FSH (105.5±4.7 IU/L), LH (89.4±5.5 IU/L) and decrease in E2 (75.3±6.1 pmol/L), Inhibin B (10 pg/ml) and AMH (8 pg/ml) concentrations. While anti-ovarian auto-antibodies were positive in 81%, the concentration of anti-thyrotrophic (197.9±55.3 IU/ml) and thyroglobulin (58.7±18.7 IU/ml) auto-antibodies did not prove the presence of autoimmune thyroiditis. Although the investigation of thyroid gland state did not reveal any symptom of autoimmune thyroiditis.

**Conclusions:** Autoimmune oophoritis, which develops after UAE should not be considered as a part of an autoimmune polyglandular syndrome. This is a distinct nosology which induced by a precipitating factor. In this case it is caused by UAE.