

P110. Consistent and combined application of dienogest and LNG-IUS to decrease the risk of IUS expulsion

K Tokhunts (AM) [1], A Khudaverdyan (AM) [2], N Abgaryan (AM) [3], N Nahapetyan (AM) [4]

CONTEXT: Intrauterine hormone-releasing Systems are now widely applied to treat metrorrhagia, endometrial hyperplasia and adenomyosis. The introduction of a 3D sonography in clinical practice, allowed to carry out detailed study both for cavity configurations and its true sizes and area and also to establish an accurate spatial location of IUS in a uterine cavity. **OBJECTIVE:** In previous works we found that risk factors for expulsion, besides the deformation of the uterine cavity, was the enlarged cavity size $> 9 \text{ cm}^2$, associated with increased distance between tubal angles $>4.5 \text{ cm}$ and after the injection of Levonorgestrel Intrauterine System (Mirena), among the patients with indicated parameters of uterine cavity, the expulsion parameters reached 90%. Meantime, the application of Mirena among the certain contingent of patients for a variety of reasons, including the prolonged usage of compliance, is preferable. Another widely used medicine for treatment of metrorrhagia (polymenorrhea), endometrial hyperplasia and adenomyosis is dienogest. **METHODS:** 3D sonography of uterine cavity before and after application of dienogest and IUS insertion.

PATIENTS: Dienogest 2mg daily has been administered to 32 patients with previous LNG-RS expulsion without deformation of a uterine cavity, but with an area of uterine cavity $> 9 \text{ cm}^2$ (on average $12,33 \pm 1,82 \text{ cm}^2$) and distance between tubal angles $>4,5 \text{ cm}$ (on average $4,97 \pm 0,38 \text{ cm}$) with expulsions occurred earlier within the first year of Mirena insertion. Dienogest with the dosage stated above was administered within 6 months, then all patients were underwent on 3D sonography. **Main Outcome Measure(s):** Ultrasound transformation of a myometrium and uterus cavity in 6 months after Vizanna reception among 22 (69%) patients was manifested in significant reduction of the uterine cavity on average up to $7,98 \pm 0,63 \text{ cm}^2$ and distance between tubal angles on average up to $4,07 \pm 0,12 \text{ cm}$. Mirena was inserted to these patients again. **Results:** Within 3 and 6 and 12 months of monitoring after the insertion, cases of expulsion were not indicated. 11 patients with persistent bloody discharges after IUS insertion in the past continued the reception of dienogest in the same dosage for another 3 months without any discharges (another benefit).

Conclusions: The combined consistent and simultaneous application of Dienogest and Mirena reduces the possibility of IUS expulsion and decreases side effects of the IUS.

[1] YSMU, Yerevan, [2] YSMU, Yerevan, [3] YSMU, Yerevan, [4] YSMU, Yerevan

