The efficacy of treatment of premenstrual syndrome (+ Poster Session)
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Context
The frequency of PMS varies widely, ranging from 5 to 40%. Currently, the most common tactic in the therapeutic treatment of PMS is the use of combined oral contraceptives (COC) to ensure the suppression of ovulation and reduce the fluctuations in the secretion of gonadotropins and sex steroids. Progestogen drospirenone - a part of low-dose COC "Yasmin", which represents a combination of 30 mcg ethinyl estradiol and the progestin drospirenone 3 mg, has progestogenic, antimineralocorticoid and antiandrogenic effects. Antimineralocorticoid activity of drospirenone is explained by a decrease in body weight in patients taking the drug, "Yasmin", in contrast to the COC with other progestins, at the reception which marked a slight increase in body weight [1,2,3,4,5,6,7]. According to researchers E.Boschitsch et al [7] when using the drug "Yasmin" in the treatment of PMS there was a significant reduction in the severity of premenstrual symptoms such as depressed mood, water retention, increased appetite, acne, the number of items decreased by 62.5%, seborrhea decreased by 25.1%. In studies E.Freeman et al in patients with severe PMS treated with a combination of ethinyl estradiol and drospirenone showed a significant improvement on all the COPE questionnaire (the Calendar of Premenstrual Experiences) and significant difference by a factor of 3 - constant unbearable appetite, acne [8]. According to the authors, the frequency of side effects with prolonged treatment COC does not differ from that in the usual way of taking the drugs, no significant disturbances in lipid metabolism, or changes in coagulation [3].

Objective
Investigation the efficacy of the drug "Yasmin" in the treatment of PMS in reproductive age womens.

Patients
62 womens 19 - 45 years with premenstrual syndrome

Methods
We conducted a survey of 62 womens 19 - 45 years with premenstrual syndrome, including medical history, general examination, ultrasonography of the pelvic organs. The evaluation of cyclic symptoms was performed by filling the "calendar of premenstrual surveillance" for three cycles to identify the cyclical nature and severity of violations [9]. This calendar includes 12 psychoemotional and 10 somatic symptoms of PMS. Psihoemotional symptoms included restlessness, anxiety, depression, irritability,
emotional lability, weakness, fatigue, drowsiness, increased appetite, aggression, crying, impaired 
concentration, memory loss, emotional isolation, increased appetite. Somatic symptoms included 
bloating, swelling, pain and breast engorgement, hot flushes, sweating, nausea, vomiting, constipation, 
dyspepsia, tachycardia, cardialgia; sensitization (cutaneous, olfactory, etc.), headaches, skin rashes, 
acne; dizziness. Each patient assesses the severity of each symptom daily on a 4-point scale, based on 
the degree of violation of their traditional way of life of these symptoms. The scale of the follicular phase 
is summarized by the answers to the 3-9th days of the cycle, the scale of the luteal phase - the answers 
for the last 7 days of the cycle. To confirm the PIP total score in the follicular phase should be less than 
40, in the luteal phase - more than 42 points. All patients with PMS was appointed agent “Yasmin” 
("Schering", Germany) containing 30 mcg ethinyl estradiol and 3 mg drospirenone. Acceptance of the 
drug lasted for 6 months in a cyclic 21-day mode. Follow-up included filling in the calendar of 
premenstrual symptoms and conduct a pelvic ultrasound.

Interventions 62 womens 19 - 45 years with premenstrual syndrome was taken, the combined oral 
estrogen-progestin drug "Yasmin", containing 30 mcg ethinyl estradiol and 3 mg drospirenone for 6 
months in a cyclic 21-day mode.

Main Outcome Measures Reduce of main psychoemotional and somatic symptoms of PMS, side effects 
of the drug.

Results
In specially gynecology and ultrasound exame womens in both groups of pathological changes in the 
reproductive organs have been identified. The average age of menarche was 12,4 ± 0,15. PMS 
symptoms appear within 6-10 days before menstruation. Within 6 months of treatment efficacy was 
assessed by completing a "calendar of premenstrual observation." The amount of points in the follicular 
phase was no more than 40, the average amount of points in the admissions process, "Yasmin" has not 
changed, at the 3rd month of treatment there was a significant decrease in the total evaluation of 
premenstrual symptoms at the 6th month of treatment score exceeding 42, survived only 2 womens. 
Rating well-being in the follicular and luteal phase was significantly different between before treatment 
and on the background of the 3-month course of therapy (p <0,01). At the 6th month of treatment 
indicators being significant differences between the phases of the menstrual cycle have been identified. 

From the psychoemotional symptoms most frequently observed in the spleen 71.0% (44), emotional 
lability in 62.9% (39), crying in 62.9% (39), increased appetite in 54.8% (34), depression 48.4% (30), the 
weakness of 48.4% (30), anxiety in 45.2% (28), aggression in 40.3% (25) of cases.

Of the somatic symptoms most frequently observed tenderness and breast engorgement in 85.5% (53), 
bloating in 61.3% (38), edema in 48.4% (30), tachycardia in 40.3% (25) of cases.
By the 6th month of treatment the main psychoemotional symptoms decreased by the spleen 54.5% 
(24), emotional lability by 61.5% (15), crying by 61.5% (15), increased appetite by 64.7% (22), 
depression by 76.7% (23), the weakness by 63.3% (19), anxiety by 50.0% (14), aggression by 64.0% 
(16) of cases.
By the 6th month of treatment the main somatic symptoms decreased by breast engorgement by 69.8% 
(37), bloating by 63.2% (24), edema by 56.7% (17), tachycardia by 68.0% (17) of cases.
Due to the antimineralocorticoid effect of drospirenone, which eliminates the effect of ethinyl estradiol, for 
3 months of treatment there was a significant reduction in the incidence of complaints of swelling. 
Symptoms such as bloating and mastalgia were stopped more slowly as the causes of these symptoms 
are in addition to fluid retention are hyperprostaglandinemiya, hyperprolactinemia and others. By the 6th 
month of treatment significantly reduced the frequency of mastalgia. The appearance of acne in the 
luteal phase of the cycle is one of the PMS, which is associated with a change in the ratio of 
progesterone and androgen-free fractions [1,4]. PMS symptoms such as aggressiveness and irritability 
associated with an increase in the luteal phase concentrations of androgens and drospirenone that has 
anti-androgenic effect reduces the affective symptoms [1,4].

Conclusions
By the 6th month of treatment reduced the main psychoemotional and somatic symptoms of PMS. The
main side effect of the therapy were intermenstrual bleeding were observed in 20.0% at 1 month of therapy to 3 months of receiving their frequency decreased to 12.0% at 6 months - up to 6.0%.

References