Symptoms and complaints of patients with Cushing’s disease (CD) according to Moscow Region database of patients with CD

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AIM
Aim of our study was to evaluate the frequency of symptoms of CD at baseline (before treatment) and its dependence from different parameters

MATERIAL AND METHODS
Clinical and laboratory data of 44 patients with CD (40 females, 4 males, 37.9±10.5 y.o.). Duration of the disease 35.5 [22;75] months

RESULTS

Complaints
1) More than 80% of patients had fatigability, weight gain, apathy, headache (see picture below).
2) 40-50% - loss of libido, bruising, muscle weakness, insomnia, hair loss
3) Less than 40% - irritability, striae, back pain*, memory loss, impaired wound healing, increased appetite, acne.

* 6 from 15 (34.1%) patients with back pain had spinal fracture. One patient with spinal fracture had no back pain.
4) Women: regular menstruation-5/40(12.5%), 12(30%) - menstrual irregularities, 23(57.5%) - amenorrhea

Clinical examination
More than 70% of patients had facial plethora, overweight/obesity, dorsochervical fat pad, leg edema and hirsutism (females) (see picture below)

BMI at baseline - 33.7 [30.4; 38.4]. Normal weight in 7% of patients, 16.3% - overweight, 76.7% were obese (34.9% - I grade).
Median weight gain was 13.0 [10.0;28.2] kg, correlated with duration of the disease (r=0.2; p=0.007).

Arterial hypertension - in 100% (by BPM).

Correlations
1) Midnight serum cortisol level and apathy, muscle weakness, hair loss, waist to hip ratio (r²=0.35; p=0.005, r²=0.3; p=0.009, r²=0.2; p=0.04, and r²=0.2; p=0.049 respectively)
2) Morning serum cortisol and apathy, impaired wound healing (r=0.1; p=0.04, and r=0.2; p=0.006)
3) Morning and midnight serum ACTH levels - with increased appetite (r=0.2; p=0.01, and r=0.3; p=0.01 respectively)
4) Midnight serum ACTH with fatigability (r²=0.2; p=0.03)
5) UFC with supraclavicular fat pads (r²=0.15; p=0.04).
6) Back pain and striae correlated with BMI (r²=0.1; p=0.04, and r²=0.17; p=0.006 respectively).
7) Weight gain and acne had a positive correlation with duration of the disease (r²=0.2; p=0.007, and r²=0.14; p=0.001 respectively).

It is known that some symptoms are specific for hypercorticism. Its frequency in our patients are shown below.

CONCLUSION
The most frequent symptoms of CD are nonspecific. The strongest correlation observed between symptoms and midnight serum cortisol and ACTH levels.