

Summary

The aim of this work was to study relationship between mucocutaneous candidiasis (MCC) and women's sexual hormones. This problem is usually solved by dermatologists, gynaecologists and mycologists separately. Our approach is original, because it is primarily based on skin and/or cutaneous appendages affection and searches for possible coincidence or other relation in vulvovaginal region.

We examined 81 women in our study and divided them into two groups according to hormone-level investigation (women in fertile and perimenopausal period, women in postmenopausal period). We also developed "Candida" questionnaire for further anamnestic data correlation. The relationship between MCC and women's sexual hormones was studied both, *in vivo* and *in vitro*.

We found *C. albicans* in vagina in both studied groups most frequently at the time of cutaneous candidiasis. In postmenopausal period the incidence of vaginal *C. albicans* was significantly lower (significantly lower levels of E2, PG). The cultivation identity between skin and vulvovaginal region was more frequent in fertile and perimenopausal period than in postmenopausal one, too. Predominantly concerned *C. albicans* again, the conformity was considerable in women with established ovulation (significantly higher levels of PG).

In presence of *C. albicans* in vagina, cutaneous candidiasis caused by the same pathogene occurred most frequently on upper extremities. The right upper extremity was affected with higher frequency, mainly in postmenopausal women.

We did not reveal the relation to the levels of T, fT and SHBG *in vivo*. Hyperandrogenic symptoms (acne, seborrhoea, hair-loss, hirsutism) were seen frequently in fertile and perimenopausal women.

According to the growth curve testing of *C. albicans* and *C. parapsilosis* in different hormonal media *in vitro*, the vaginal strains show more sensitivity to sexual hormones and present themselves by steep shape of the curve unlike cutaneous ones. Their growth ability could be influenced not only by E2, but also by PG and T. *C. albicans* seems to be more sensitive to hormone stimulation than *C. parapsilosis*. We can not establish relevant statistical evaluation based on these limited small data tested *in vitro*.