

## The factors of chronic replaced urolithiasis in East Europe

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Chronic replaced urolithiasis (CRU) development dependence on the age.

The wide use preservatives, stabilizers and increased amounts of flour products in meal leads to the decrease of urine pH and alter of the physical and chemical urine content that rises lithogenesis.

Urolithias and its clinical symptoms become one of the most recurring problems in modern urology.

Anomalies of urosexual path, infravesical obstruction, damaged exchange of microelements, hormonal disbalans, hypopolyvitaminosis, heritaged problems, hypodynamia, living in endemic areas are the anatomo-physiological factors which traditionally contribute to appear of concrements. But some of European people who suffer from chronic replaced urolithias don't have such factors.

In our previous clinical studies it have been proved that one of the most common reasons of CRU development was the presence of chronic urine tract infection mostly *Ureaplasma Urealitycum*.

Target of current research is to investigate the pathogenetic factors of CRU in patients without anatomo-physiological variations of urosexual path depending on their age.

The study carried out on 328 patients with CRU in 2003-2012. According to the anamnesis, physical status, clinical and special analysis 212 patients didn't have anatomo-physiological factors of CRU. The age of patients hesitated from 21 till 79 years old (average  $45.4 \pm 2.4$ ). All patients had excreted stones for several times. 117 of them were proceeded to stone demolishing one or more times. Stone delete operations were done to 79 patients. All the patients were preceded to urine bacteriological investigation, besides the analysis for bacteria, *Ureaplasma Urealitycum* and other STI were taken out of urethra. The persons with pathogenic infections were cured with antibiotics according to sensitivity. Patients over 35 years old had sexual hormonal function investigation (testosterone, estradiol) and those who had decreased hormonal function (as a rule over 50) were treated with hormonal substantive therapy. Correspondingly all patients were divided into two groups. Overall period of observance was 1-4 years.

Among patients who suffered from urolithias without anatomo-physiological variations were found pathogenic infections in 91.6 % from the first group and 52.4% from the second group. *Ureaplasma Urealitycum* (74.3%), *Proteus Mirabilis* (13.4%) were diagnosed as mono and mix infections more commonly. Deleting stones and curing patients from these diseases in 87.5% followed to stop stones formation in future. 94% of second group patients had decreased sexual hormones status. So, in 58% cases hormone therapy prescription led to stop in stones formation.

1. CRU ethiopathogenesis depends on the patient's age
2. Before 50 years chronic infection (*Ureaplasma Urealitycum* in 74.3%) is the main CRU reason
3. After 50 years sexual hormones deficiency is the main CRU reason
4. Chronic infections treatment in the 1<sup>st</sup> group and substantive hormonal therapy in the 2<sup>nd</sup> one lead to stop in stones formation in 87.5% and 58% correspondingly