



**Al-Ketan M, Tytova A.**

**ENDOTHELIAL DYSFUNCTION IN ACUTE CORONARY SYNDROME**

**Kharkiv National Medical University, Kharkiv, Ukraine,**

Department of internal medicine № 2, clinical immunology and allergology),

**Aim:** Study of endothelium-dependent vasorelaxation mechanisms, their relations with changes in hemodynamics in patients with acute coronary syndrome, optimization of diagnosis of this disease, prognosis and effects of this disease.

**Materials and methods:** 45 patients 33M (73%) and 12 F (27%), with (ACS) were examined and distributed into two groups: The first group with acute (MI)-(15 patients), the second group with unstable angina (UA)-(30 patients). The average age of the patients is  $62 \pm 6$ , of them 14 (31%) had arterial hypertension, in 9 (20%) along with cardiovascular disease had clinical signs of diabetes type 2. Almost half of the patients-22 (49%) suffered from nicotine addiction. Prolonged anginal pain at rest occurred in 7 (15, 5%) patients who were diagnosed with (MI). progressive unstable angina class 1A observed in 10 (22, 2%) patients, and unstable angina class 1B in 7 patients. In 13 patients observed angina at rest, Among them, subacute angina in 9 patients, in 6 of them -Class 2A, in 3 of them - Class 2B, 4 patients -class 3B. Atypical variants course of corticosteroids were found in 12 (26.6%). physical examination: tachycardia in 13 (28.8%), bradycardia in 5 (11.1%) patients, BP was elevated in 14 (31%) patients. Level of endothelin-1 in patients with myocardial infarction likely increased compared with normative data in the first day of the study is on average 10.1 pg /ml. The results obtained on day 10 monitoring these patients showed a significant reduction in endothelin-1. Thus, during this period the average endothelin-1 were 6.2 pg /ml. In patients with unstable angina was also likely increase endothelin -1 in comparison with standard parameters in first day study. Average levels of endothelin -1 in this period were 8.3 pg / ml, compared to patients with myocardial infarction were lower. Indicators of the level of endothelin -1 in patients with unstable angina also falling on 10 days supervision of patients. Study of endothelial vasorelaxation the presence of hyperlipidemia and hypertension suggest that the risk factors for acute coronary syndrome is not only affect the progression of structural changes in atherosclerosis, but also a negative effect on the functional state of the endothelium, causing disruption mechanisms of endothelium-dependent vasorelaxation.

**Conclusions:** Main risk factors that have a main role in appearance of ACS are: diabetes mellitus, hypertension, nicotine dependence. Identified hyperlipidemia, hypercholesterolemia have pathogenetic importance in the formation of ACS. In patients with ACS established changes of ST segment and T-wave, episodes of the left bundle branch block, indicating the presence of ischemia. Having a lot of hypokinesia and akinesia segments wall of the left ventricle in echocardiography confirmed ACS patients, mostly is common for patients with MI, proves the endothelial dysfunction in this disease and can be used as an additional marker in the diagnosis of ACS.

**Amoh Christin, Zazdravnov A. A.**

**RENAL STATUS OF CHILDREN WITH SICKLE CELL DISEASE IN ACCRA, GHANA**

**Kharkiv National Medical University, Kharkiv, Ukraine,**

**Department of general practice – family medicine**

**Introduction:** In West Africa, the prevalence of sickle cell disease (SCD) is 2%. The disease adversely affects growth, development and organ function including the kidneys. There is however a dearth of information about the renal status of SCD children in Ghana.



**Aim:** To assess the renal status of children with SCD in steady state.

**Material and methods:** This was a hospital-based cross-sectional study, conducted over a 4 month period, July to November 2008 at the Department of Child Health, (DCH) Paediatric Sickle Cell Clinic (SCC), Korle Bu Teaching Hospital (KBTH), Accra. Participants: Cases-357 SCD cases and 70 of their HbAA siblings as controls. Documentation of their socio-demographic data, clinical data and dipstick urinalysis findings, and renal ultrasonography on selected participants

**Results:**The mean [SD] age was 7.18 [3.15]yrs for cases and 5.16[3.28]yrs for controls. The genotypes were Hb SS (76.7%), Hb SC (21.8 %), and Hb S $\beta^{\text{thal}}$  (1.4%). Urinalysis showed leucocyturia in 12.6% versus 5.7% ( $\chi^2=62.5$  and the  $p=0.000$ ), isolated proteinuria in 2.8% versus 1.43% ( $\chi^2=10.01$  and  $p=0.001$ ) haematuria in 2.6% versus 0% ( $\chi^2=9.233$ ,  $p=0.002$ ) and nitrites in 2.2% versus 1.4% ( $\chi^2=16.3$ , $p=0.02$ ) of cases and controls respectively. The youngest SCD case with proteinuria was 2yrs. old. Proteinuria prevalence increased with age, occurring in 5.7% of cases aged 9–11yrs. and 20.6% of cases aged 12yrs. Two-thirds of the proteinuria cases were aged 9–12yrs., of whom 50% were aged 12yrs. Renal ultrasound findings were normal in all those examined.

**Conclusion:** Urinary abnormalities suggesting nephropathy occur early in SCD patients in Ghana. Routine dipstick screening at clinic visits countrywide would help early detection and prompt intervention to limit renal impairment.

**Bardinov D.V. Lahno O.V. Kirilovich E. I.**  
**THE STATUS OF BONE METABOLISM IN PATIENTS WITH**  
**THYROTOXICOSIS SYNDROME**

**Kharkiv National Medical University, Kharkiv, Ukraine,**  
**Department of internal medicine №2**

**Introduction.** When thyrotoxicosis is the amplification of both components of bone remodeling, but in a greater degree of resorption, resulting in the number of resorbed bone in each unit remodeling exceeds the number of newly formed. This leads to bone loss and osteoporosis.

**Aim:** to assess the degree of influence of different variants of the thyrotoxicosis syndrome on bone metabolism in patients without other risk factors of osteoporosis.

**Materials and methods:** 20 patients (women, age from 29 to 45 years) with the thyrotoxicosis syndrome: 7 patients with overt thyrotoxicosis despite the illness von Basedow - graves ' disease, 7 patients with subclinical hyperthyrosis on the background of toxic nodular goiter (TNG) and 6 patients with drug subclinical hyperthyrosis. Assessment of bone metabolism were carried out comprehensively by using dual-energy x-ray bone absorptiometry (DXA), laboratory evaluation of bone remodeling.

**Results:** changes of bone metabolism was assessed by t-test (DXA), serum hormone levels (osteocalcin, alkaline phosphatase, procollagen type 1, beta-cross labs, thyroid hormones, parathyroid hormone, LH, FSH, estradiol, testosterone). All the patients were recorded minor changes of mineral bone density (BMD) (t-test, from to -1,2 -1,6) related osteopenia. In this group of patients noted increased levels of osteocalcin and alkaline phosphatase.

**Conclusion:** in patients with different variants of the thyrotoxicosis syndromemarked the initial changes in mineral density of bone tissue and increased levels of markers of bone