

## **INTERRELATION BETWEEN MIXED CRYOGLOBULINEMIA AND DEVELOPMENT OF LIVER FIBROSIS IN CHRONIC HCV INFECTION**

Bankole Adeitan Idowu, Mashko O.P.  
Supervisor: assistant, c.med.s. Mashko O.P.  
Zaporozhye state medical university  
Department of infectious diseases

Purpose of the study – identify the interrelation between mixed cryoglobulinemia and morphological changes of the liver in patients with chronic hepatitis C. Patients and methods. Under the supervision there were 30 chronic HCV patients with the presence of mixed cryoglobulinemia aged 27 to 58 years (men - 19, women - 11). The following methods were used in this research work: clinical, virological (identification of HCV), spectrophotometric (determination of cryoglobulins), morphological investigation of liver. Results of the research. Among surveyed patients following stages of liver fibrosis were diagnosed: F1 - in 8 (26,7%), F2 - in 8 (26,7%), F3 - in 6 (20,0%), F4 - in 8 (26,7%) patients. Our results demonstrated significantly higher ( $p < 0,05$ ) level of mixed cryoglobulins in the serum of patients with fibrosis stage F 3-4 ( $0,79 \pm 0,03$  opt.un.), than in the serum of patients with liver fibrosis F 1-2 ( $0,70 \pm 0,03$  opt.un.). Positive correlation between the concentration of mixed cryoglobulins in serum and severity of liver fibrosis ( $r = +0,32$ ,  $p < 0,05$ ) was detected. Besides, patients with liver fibrosis stages F 3-4 had greater ( $p < 0,05$ ) incidence of some clinical signs of cryoglobulinemic syndrome compared with patients with stage liver fibrosis F 1-2: general weakness - 10 (62,5%) and 14 (100%), skin purpura - 2 (12,5%) and 10 (71,4%), Meltzer's triad - 1 (6,3%) and 6 (42,8%) respectively. Conclusions. In chronic HCV patients with mixed cryoglobulinemia liver fibrosis F 3-4 degree is associated with higher level of cryoglobulins in serum and greater incidence of clinical signs of cryoglobulinemic syndrome.

## **ANTIOXIDANT SYSTEM PECULIARITIES AT NEWLY DIAGNOSED LUNG'S TUBERCULOSIS AND HIV/TUBERCULOSIS CO-INFECTED PATIENTS**

Gabriel Alejandro Ortega Moreno  
Supervisor: professor, MD O.S. Shalmin  
Zaporozhye state medical university  
Phthiology and pulmonology department

The aim. To detect antioxidant system peculiarities at newly diagnosed tuberculosis and HIV/tuberculosis co-infected patients. Materials and methods. 100 patients with HIV/tuberculosis (1 group), newly diagnosed tuberculosis (2 group) and 32 healthy donors were examined. Catalase activity by Koroluk M.A. method, superoxide dismutase activity (SOD) by Hoglof B. method, glutathione level by standard method, glutathione-reductase (GR) and glutathione-peroxidase (GP) levels by Beutler E. method, glutathione-transferase level by Habig W.H. method were determined. Results. Catalase activity were decreased at co-infected patients in comparison with control and tuberculosis:  $3,0 \pm 0,31$ ;  $4,49 \pm 0,37$  and  $4,45 \pm 0,22$  mcut/g/min,  $p < 0,05$ , in accordance. SOD was increased at co-infection ( $5,79 \pm 0,84$ ), decreased at tuberculosis ( $1,86 \pm 0,33$ ) in comparison with control ( $2,94 \pm 0,61$  units/mg),  $p < 0,05$ . Glutathione levels were decreased at all the patients:  $1,1 \pm 0,12$  at 1 group,  $1,23 \pm 0,23$  – at 2 and  $1,53 \pm 0,15$  mcmol/g Hb at control,  $p < 0,05$ . GR and GP levels were lower at co-infected patients ( $1,39 \pm 0,18$  and  $11,9 \pm 1,5$ ) in comparison with tuberculosis patients data ( $2,08 \pm 0,35$  mcmol/g and  $14,7 \pm 2,5$  IU/g Hb),  $p < 0,05$ . Conclusion. Catalase activity, GR and GP levels decrease at co-infection HIV/tuberculosis. Glutathione activity decrease at all the patients. SOD decrease at tuberculosis and increase at co-infection.

## **IS THE OBSTRUCTIVE UROPATHY A SEQUENCE OF VASCULAR DISORDERS IN BPH PATIENTS?**

Gubar A.O., Bachurin G.V., Bachurin V.I., Dovbysh M.A., Ahmed Rafia Hasan  
Zaporozhye state medical University  
The chair of Urology, X-ray diagnostic and therapy

Introduction & objectives: Benign prostate enlargement (BPE) and vascular diseases are both common in aging men. The aim of this study was to determine the role of concomitant vascular disorder in BPE progression and development of obstructive uropathy (OU). Material & methods: A case control study of 175 patients (hospitalized from March 2013 to March 2014) with diagnosed BPE, complicated by obstructive uropathy was performed. The inclusion criteria were bilateral retention of upper urinary tract, chronic urinary retention (residual urine volume more than 200ml) and ischuria paradoxa. Group of 107 patients with BPE, without obstructive uropathy complications served as a control group. Patients' evaluation data included: LUTS assessment (by IPSS), digital rectal examination, urinary tract ultrasonology, urine analyses, serum creatinine level. Cardiologists' assessment records were considered for diagnosing of concomitant vascular disorders. Exclusion criteria were bilateral urolithiasis, beforehand drained urinary tract, neurological pathology with pelvic organs' affection. The data were analyzed by StatSoft Statistica 6.0 software. Results: Both groups didn't differ by patients' age ( $70,93 \pm 6,6$  vs  $70,45 \pm 8,3$ ,  $p = 0,9$ ). Between the two groups there was no significant difference in mean prostate volume ( $70,35 \pm 40,9$  vs  $71,35 \pm 38,3$ ,  $p = 0,73$ ) and presence of intravesical prostate growth (42,1% & 44,7%;  $p = 0,93$ ). Expression of clinical components of metabolic syndrome (MS) (atherosclerosis, diabetes mellitus – II, hypertension) estimated by logistic regression is significantly more pronounced in the group with obstructive uropathy ( $p < 0,001$ ). Among MS components the most significant difference between groups has