suspected only in one Kenyan school; a surveillance conducted in Pakistan in 2013 showed that about 44 % of dwellers were positive for Leptospirosis. Ukraine does not stand out of other countries by the level of the incidence of Leptospirosis with it's annual results of 1,5 cases per 100000 (under-recognition is not excluded). A retrospective analysis of Leptospirosis morbidity that was performed by us showed that Leptospirosis morbidity in Ukraine was 0,70 per 100000 in 2012 (317 cases) and 0,79 per 100000 in 2013 (358 cases). We also have Leptospirosis morbidity data in Kharkiv region that refers to natural foci zones. In 2012 3 people were infected (intensive index is 0,11 per 100 000 population) and only 2 cases of Leptospirosis in human were detected in this region in 2013 (intensive index is 0,07 per 100 000 population). Such unpromising results basically may be due to the lack of awareness of significance of the problem. In 2010 the World Health Organization (WHO) established the Leptospirosis Burden Epidemiology Reference Group (LERG). The main aim of LERG is to provide the necessary disease burden data that is essential for the design of appropriate policy targeted towards decreasing the burden of Leptospirosis. According to WHO Leptospirosis can become a preventable disease when: risk factors are appropriately identified and managed, interventions are targeted risks at individual and community levels; all relevant sectors collaborate and coordinate prevention and control measures.

Conclusions: Due to under-recognition, nowadays not much is known about the actual impact of Leptospirosis on people. Some efforts from individuals and communities need to be made to prevent disease burden.

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POSSIBILITIES OF LIVER FIBROSIS STAGES DIAGNOSTICS IN PATIENTS WITH CHRONIC HCV-INFECTION

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Introduction. Currently problem of chronic HCV-infection remains actual. It is related with considerable amount of the infected persons (more than 200 million population of the Earth) and with high inclination to chronic forms with next transformation to cirrhosis and primary liver cancer in 20-40 % of cases. One of the most important part of the process, that takes place under the action of virus, there is liver fibrosis. Nowadays different invasive and noninvasive diagnostics methods are used, but all of them has disadvantages.

Aim – to improve efficiency of liver fibrosis diagnostics in patients with HCV-infection.

Materials and methods. Group of supervision included 102 patients with HCV-infection. From them 29,6% were men and 70,4% were women. Middle age of patients was 43 years old. Etiology of disease was confirmed by immunofermental analysis (anti-HCV IgG, anti-HCV core IgG, anti-HCV NS-3,-4,-5 IgG, anti-HCV IgM) and polymerase chain reaction (HCV RNA). Stages of liver fibrosis were estimated by FibroMax. Content of serum transforming growth factor beta 1 (TGF-β1), matrix metalloproteinase-1 (MMP-1) and haptoglobin was examined as a potential liver fibrosis biochemical markers. Results of research were calculated by traditional statistical methods.

Results. Decreased level serum MMP-1 and haptoglobin and increased level of serum of TGF-β 1 were revealed. We conducted a correlation between the content of serum MMP-1, TGF-β1, haptoglobin with the stages of fibrosis determined by FibroMax and

revealed the presence of next links: between MMP-1 and the stage of fibrosis - reverse strong, between haptoglobin and stage of fibrosis - reverse moderate, between TGF-β1 and the stage of fibrosis - direct strong connection. On the basis of this correlation we calculated "diagnostic fibrosis index" (DFI) by formula: DFI = MMP-1 / TGF-β1 × haptoglobin. According to our data fibrosis stage 0 (F 0) could be diagnosed if DFI>10; F 1 – 4< DFI <9; F 2 – 3< DFI <4; F 3 –1< DFI <3; F 4 – DFI <1. For verification of sensitiveness of this method we compared results which were obtained with usage of DFI with results of FibroMax in 31 patients with HCV-infection. Coincidence of fibrosis stages was 90,32 %.

Conclusions. 1 Increase serum content of TGF-ß 1 and reducing of MMP-1 and haptoglobin were found in patients with chronic hepatitis C. 2. A significant correlation between the presence of liver fibrosis stage according to FibroMax and content of serum TGF-ß 1, MMP-1, haptoglobin was revealed. 3 The proposed method of liver fibrosis stage diagnostics allows to differentiate the initial stages of fibrosis with moderate and severe. 4 The method has high sensitivity (90,32%) and can be used as a method of noninvasive diagnostics of liver fibrosis in patients with chronic HCV-infection.

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THE COMBINED EFFECT OF LINCOMYCIN AND BENZOYL PEROXIDE AGAINST S.AUREUS STRAINS

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Introduction. Recently the growth of pyoinflammatory diseases of different localization, caused by opportunistic pathogens, has noticed. The most famous opportunistic pathogens include S.aureus, which can cause a wide range of pathological processes, including the skin and soft tissue (about 70%). The main method of combating staph infection is use of antibiotics. The effectiveness of treatment depends on the level of antibacterial activity of the drugs and combined use of them.

Results. We carried out a determination of the antibacterial activity of lincomycin and benzoyl peroxide (BP) against S.aureus strains in vitro. The research was carried by micromethod using 96-well flat-bottomed plate by method of double dilution. The effect of lincomycin and BP was studied by mean of checker-board. This method was as follows: lincomycin with higher concentration was applied into the first well with a consequent reduction of concentration in 11 well while BP with higher concentration was applied into the 11 well with consequent reduction towards 1 well (12 well – control of S.aureus, without antibiotics). This method allows to determine fractional inhibitory concentration index (FICI), by value of which we can view the effectiveness of combined use of the drugs. FICI = MIC (minimal inhibation concentration) (lincomycin + BP)/ MIC (lincomycin) + MIC (BP+lincomycin)/MIC (BP) if FICI < 0,5 – synergism, from 0,5-1,0 – additivity, from 1,0-4,0 – indifference, FICI > 0,5 – antagonism.

We have calculated MIC of lincomycin and BP separately that was 0,9μg/ml and 440μg/ml respectively. While combined effect МИК of lincomycin and BP was 0,2 and 175 μg/ml. By the formula above we have calculated the value of FICI. FICI=0,62, combined effect – additivity.

Conclusion. Thus we have proved the effectiveness of combined use of lincomycin and benzoyl peroxide in vitro against S.aureus strains due to their additive effect.