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**FORENSIC-MEDICAL EVALUATIONS DAMAGES OF RESPIRATORY SYSTEM  
WITH ACUTE RESPIRATORY FAILURE**

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**Actuality.** In specialized literature and legal documents in sufficient level, summation of features of acute posttraumatic respiratory insufficiency (ARI), which must be used for its forensic-medical evaluation. Not defined, in which the severity level of ARI, forensic experts in case of damages of respiratory system (DRS), affections of larynx, trachea, lungs, must evaluate this injury as dangerous for life. It should be noted that in different literature, the authors suggest different laboratory and instrumental parameters that characterize the signs and severity of ARI.

**Purpose.** Content analysis expert cases of injuries respiratory system, which complicated of ARI, for identify ways of improving forensic-medical diagnostics.

**Material and methods.** We analyzed the 87 conclusions of forensic-medical examinations connected with DRS form archives of Kharkov regional bureau of forensic medical examination from 2007-2015 years.

**Results and discussion.** The analysis of the observations showed that the greatest difficulties in the experts are the cases of forensic-

medical assessment, blunt trauma of lung with occurrence hemopneumothorax and ARI, especially when not injured ribs. At examinations take place cases, connected with change the severity level of physical injuries, established during the initial and follow-up examination. Experts at carrying out such examinations in his conclusions refer to paragraph 2.1.2 "Rules of determining the severity level of physical injuries" and evaluate chest injury and its organs as severe physical injury as dangerous for a life. Then, during repeated examinations previously estimated severe level of physical injuries, changed to simple level of physical injury. The experts refer to the absence of ARI as a dangerous for a life events, in accordance with paragraph 2.1.3 "o" "Rules ...".

Based on a thorough analysis of contemporary literature, devoted to the diagnosis of emergency conditions, we selected ARI criteria, which can be used to improve the objectification and estimation at forensic-medical examination. Depending on the severity level of ARI, we have identified and grouped 14 clinical, instrumental, laboratory



parameters, which include the definition of partial oxygen tension and carbon dioxide in arterial blood, its acidity et al., which is quite objective and characterize four degrees of severity level ARI.

**Conclusions.** Forensic-medical evaluation of injuries DRS, which belongs to dangerous for a life,

especially with the emergence of ARI has some difficulties. Usage at forensic-medical examination of well-defined clinical, instrumental and laboratory signs of ARI, increase objectification of expert conclusion and help avoid mistakes at determining the severity level of physical injuries.

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**THE EFFECT OF VINBORON ON THE EXPRESSION PROCESSES OF APOPTOSIS IN GASTRIC MUSOCA WITH IBUPROFEN-INDUCED GASTROPATHY IN RATS**

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**Introduction.** Nonsteroidal anti-inflammatory drugs (NSAIDs) is the most popular for the treatment of a variety of diseases. However, their use can cause serious complications in the gastrointestinal tract. To identify the specific lesions of the stomach, associated with the use of NSAIDs in 1986 S.H. Roth suggested the term "NSAID gastropathy." From the literature it is known that one of the mechanisms ulcerogenic actions NSAID stands activation of apoptosis of epithelial cells of the gastric mucosa.

**The aim:** to rate according immunohistochemical study effect of ibuprofen (218 mg/kg) and its combination with vinboron (11 mg/kg) on the apoptosis of epithelial cells of gastric mucosa in the

simulated adjuvant arthritis (AA) in rats.

**Methods & materials.** To assess the pathological changes in gastric mucosa studied experimental material produced from AA rats after administration of ibuprofen and its combination with vinboron. To examine apoptosis in caspase-3 (CPP32) was selected as a marker. The estimation of the expression of caspase-3 in the formulations of the gastric mucosa at 400-fold magnification in similar sections using a semiquantitative scale color intensity evaluation.

**Results.** The study showed that in the monotherapy group ibuprofen number of positively stained cells was more than 60%, which was significantly ( $p < 0,05$ ) higher than in intact rats and Group