Medical and legal aspects of application of the gas weapon of self-defense

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Distribution among the population of the Russian Federation of the gas weapon of selfdefense and an ammunition to it is regulated by the Law on the weapon of 1993. The gas weapon is weapon intended for time defeat of the alive purpose by application of toxic substances, allowed to use by Ministry of Health.

The weapon which is applied to shooting by the cartridges equipped with irritating substances or irritants (CS, CN, CR, DA etc.) on the general design, appearance and the sizes basically is analogue of known models of fire-arms. The wide circulation of irritants as the police gases intended basically for dispersion of congestion of people, appeared possible due to a significant range between their effective and harmful concentration. From the toxic point of view the basic advantage of this kind of the chemical weapon is its high efficiency at relative safety of application. On toxicity these connections concern to substances 1-2 classes of danger. According to the law the given kind of the weapon is referred to group of the civil chemical weapon. The weapon intended for use by citizens with a view of self-defense concerns to the civil weapon, for hunting and employment by sports.

Nevertheless, till now there is debatable a question on reference of gas revolvers and pistols (gas weapon of self-defense) to fire-arms. Use of definition " fire gas devices " for the characteristic of the given kind of the weapon does not solve the problem on introduction of standards of its damaging action. Application of gas weapon of self-defense having multifactorial damaging action from a close distance of a shot has resulted in occurrence of new kinds of a fire pathology which by virtue of features of the occurrence can be characterized as the combined fire damages. Damaging factors of such weapon: the shock wave which depends on caliber, causes mechanical damage of fabrics; the high temperature causes a burn of fabrics; the chemical factor has the expressed poisoning action.

The state postgraduate medical institute (Moscow) in studying damages by gas weapon of self-defense uses the complex scientific approach which has collected in modeling of similar damages on animals with connection histology, microbiological, chromatographic methods of research. Damaging actions are investigated of a gas-flame jet on the basis of physical and mathematical modeling and ballistic research.

The carried out experimental research has allowed to prove, that the gas weapon of selfdefense is fire, and its application on close distance carries health hazard and lives of people. Definition of special ballistic and toxicological researches which purpose creation of the international standards to a cadastre of the given kind of the weapon determining more rigid requirements to distribution of gas revolvers and pistols among civilians will be therefore is necessary.

Keyword: gas weapon of self-defense, damaging factors, modeling.