METHOD OF REGENERATION OF BIOLOGICAL TISSUES BY THE LIGHT EMISSION

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RELEVANCE OF THE PROBLEM. Modern medical practice more often uses laser technology for medical purposes both internal organs and external integument of the human body [1].

The regeneration of biological tissues, in particular, skin, is provided by the integrated absorption of electromagnetic radiation of specific wavelength and heat generation, which has a widely acting effect [2].

MATERIALS AND METHODS. Under the influence of low-intensity laser radiation the level of oxygen consumption increases improves microcirculation of biological fluids in the body, that, in its turn, it has a positive effect on the condition of the patient. Ensuring the effectiveness of the healing of wounds, injuries, burns, scar removal of structures is also relevant [3]. The method of exposure *in vivo* on the biological tissue of the body certain modes of integrated radiation was problem offered. Researches have shown, that efficiency of exposure modes prevail over other methods of treatment is needed to improve as a result of good tolerability by patients and, further, absence of pathological conditions on the part of the body's systems. It is important to provide usage safe exposure mode, which will depend on the purpose of treatment and the level of organ tissue damage.

CONCLUSIONS. On the basis of conducted researches dependence of the rate of healing of the surface structures on the radiation modes are revealed. The research of the proposed method gives the opportunity of development of new devices and therapy systems in the field of dermatology and combustiology.

References

- 1. Москвин, С.В. Основы лазерной терапии. / С.В. Москвин, В.А. Буйлин М., «Триада», 2006. 256 с.
- 2. Тимчик, Г.С. Інтегровані фізіотерапевтичні системи ТОНТОР. / Г.С. Тимчик, В.І. Скицюк, Т.Р. Клочко К., НТУУ «КПІ», 2007. 216 с.
- 3. Дастжерди, А.Х.М. Физиотерапевтический метод комплексного воздействия на рубцовые ткани. / А.Х.М. Дастжерди, Т.Р. Клочко, В.Ф. Рассохин // Вісник НТУУ "КПІ". Серія «Приладобудування». 2006. Вып. 32. С. 139-146.