



Review Article
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# The Use of Infrared Resonance Therapy (IRT) in the Rehabilitation of Patients with Post-Covid Consequences



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#### Relevance

Up to 20% of people who have had a coronavirus infection suffer from long-term symptoms (post-covid consequences) lasting more than 12 weeks [1,2]. Post-covid consequences are the cause of a decrease in working capacity, long-term disability in patients who have suffered a coronavirus infection. Among them, there are neurological, cardiological, hepatic, etc., post-covid consequences [3]. The use of existing methods of rehabilitation of post-covid consequences does not always give the desired result. Therefore, the development of effective methods of treatment and rehabilitation of patients with coronavirus infection and post- covid consequences is relevant. There are reports in the literature about the use of IRT in the treatment of various diseases [4,5]. However, in these works, the possibility of using IRT in the rehabilitation of patients with post-covid consequences has not been studied.

#### Material and Methods of Research

18 patients with post-covid consequences were under observation. Despite the use of existing rehabilitation methods, there was no clinical improvement in them. 5 patients had neurological consequences, such as headache, weakness, fatigue, asthenia, sleep disorders, depression. 5 patients had cardiological consequences, such as cardialgia, ECG-signs of a violation of the repolarization process in the myocardium (a decrease in the amplitude of the T wave, negative T waves in various leads).

8 patients had hepatic post-covid consequences. Among them, 3 patients had cytolysis syndrome (ALT and AST levels were more than three times higher than the upper limit of the norm),

3 patients had cholestatic syndrome (bilirubin levels were more than twice higher than the upper limit of the norm), 2 patients had mixed syndrome (a combination of cytolysis syndrome with cholestatic syndrome).

#### **Treatment Results**

In patients with hepatic post-covid consequences, after 8-10 sessions of IRT, a decrease in elevated ALT, AST, and bilirubin levels to normal values was recorded, subjectivity of the sclera and skin disappeared, patients stopped complaining of pain in the right hypochondrium and a feeling of bitterness in the mouth. Patients with neurological post-covid consequences after 12 sessions showed an improvement in their psychological state, improved mood, sleep, they became less irritable, stopped complaining of headache. They had an improvement in their functional state, which was manifested in an increase in exercise tolerance.

In patients with cardiological post - covid consequences, after 5-10 sessions, an ECG showed an improvement in the process of repolarization in the myocardium, negative T-waves became positive. The patients had no complaints of pain in the heart area.

#### Conclusion

Pulsed, far infrared IRT ranges, have hepatoprotective, cardioprotective and neuroprotective effects.

IRT is an effective method of rehabilitation, helps to improve well-being, restore working capacity in patients with post-covid consequences. IRT can be used as a method of rehabilitation of patients with post-covid consequences.

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