Abstract

Space is a weightless environment, and astronauts spending a long time in these conditions undergo a number of changes and risks in their bodies. Rehabilitation intervention is needed for astronauts to adapt to the Earth after the flight and to prevent these risks. Risks that require rehabilitation intervention include muscle atrophy, bone demineralization, neurovestibular symptoms, changes in the cardiovascular system, changes in vision and hearing, weakness of the immune system and psychological effects. A special rehabilitation program is being prepared to eliminate these risks. This program includes physical exercises, medical examinations, psychological support and physiotherapy. Astronauts’ muscle mass and physical exercise programs are conducted continuously to increase bone density. In addition, physiotherapy is used to restore muscle strength. This article will review and discuss the physical and psychological changes that occur or may occur in astronauts after flight and the rehabilitation plans for these changes.