



Contribution of Cryogenically Cooled Air on Wellness

Cold therapy is probably one of the oldest treatment modalities. Regular application of cold material on painful or inflamed parts of the body improves symptoms by alleviating pain by decreasing blood flow to the inflamed organ or body part, thereby decreasing sensation. People noted this phenomenon hundreds, if not thousands of years ago. Controlled local application of ice packs is an ordinary treatment in modern rheumatology. Application of coldness on almost the whole body has been used for centuries through a widely present practice of cold water swimming. There are many cold water swimmers in present time. These people, carried by some innate feeling, try to achieve a higher level of health through this practice. The modern version of the application of cold objects on the whole body is whole body cryotherapy. This novel wellness modality has significant potential to improve symptoms in different diseases, but also it improves general health. Cryogenically cooled air which is used in whole body cryotherapy has a temperature of -100°C and lower (Lubkowska 2012). Cold application in whole body cryotherapy procedure is strictly controlled. Duration of a single session in a suitable chamber, with a patient in minimal clothing, is one to three minutes (Westerlund 2009). The procedure was originally introduced in 1978 by Prof. Toshiro Yamauchi and his team in Japan (Lubkowska 2012). In this pioneering achievement, whole body cryotherapy was used for the treatment of rheumatism. Until today the list of potential indications became significantly longer. Strictly controlled use of cryogenically cooled air has a target to achieve a temporary decrease in body temperature. This transitory drop in body temperature results in certain desirable physiological changes. Some of the favorable physiological responses include an increase in hormones such as beta endorphins and norepinephrine, and stimulation of blood flow (Lubkowska 2012). Repeated sessions of whole body cryotherapy has a potential to result in therapeutic effects. The scientific popularity of the procedure has skyrocketed in its short history. There are numerous scientific articles about its existing and possible role in the treatment of different diseases. The primary indication for whole body cryotherapy, rheumatism, is also existent today. The procedure has a positive impact on pain, fatigue and walking time in rheumatoid arthritis patients (Gizińska, Rutkowski et al. 2015). Other rheumatological and orthopedic conditions, such as ankylosing spondylitis and tendinitis, are also indications for the treatment in cryochambers (Lubkowska 2012).

Many individuals who repeatedly used the procedure for other reasons noted psychic benefits of it. Their mood improves, same as a sleep. Scientists have examined this phenomenon and proposed a role of whole body cryotherapy as a useful adjunct treatment of depressive and anxiety disorders (Rymaszewska, Ramsey & Chłodzińska-Kiejna 2008). The procedure has a positive impact on sleep quality (Lubkowska 2012). The use of cryogenically cooled air has found its place as the helpful treatment in the complex disease such as multiple sclerosis.

Cryotherapy sessions result in improving functional status and fatigue in multiple sclerosis patients (Miller, Kostka et al. 2016). There are sound theoretical models which support the possible role of whole body cryotherapy in weight loss and immunity. It is important to say that use of the treatment is not limited to pathological states. Whole body cryotherapy is regularly used by many athletes because of its potential to speed recovery (Lubkowska 2012). In fact, the positive impact of cryogenically cooled air is there for everyone. Whole body cryotherapy is our new weapon in achieving wellness and adjunct treatment of numerous diseases.

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