

## **Long-Term after-Effects of Wet Cupping Therapy on Some Inflammatory Mediators and Antioxidant parameters in Jordanian Healthy Adult Men**

Nafe M. Al-Tawarah, PhD\*

### **ABSTRACT**

**Background and Aim:** This work was performed to evaluate the long-term after-effect of Wet Cupping Therapy (WCT) on the healthy volunteers regarding some inflammatory markers, which include IL-6, IL-10, C3, C4, IgA, IgM and IgG. Moreover, this study aimed to investigate the effectiveness of WCT in enhancing the antioxidant levels such as GPX, GR, SOD and GST in healthy individuals after receiving this intervention.

**Method:** Venous blood samples were collected from 29 volunteers out of 31 healthy adult men engaged during the study (two excluded). A sensitive sandwich ELISA kit evaluated the inflammatory markers. The antioxidant parameters were spectrophotometrically measured.

**Results:** Analysis of results revealed a significant chronic drop in all pre-and post- inflammatory markers with some variations including a more obvious drop. Additionally, there was an increase in the serum level of antioxidants after receiving WCT.

**Conclusion:** WCT dramatically induces a significant drop in many inflammatory markers; pre-and post-inflammatory factors. Moreover, this intervention induces the efficiency of antioxidant parameters known as a defensive system against various reactive oxygen species (ROS).

**Keywords:** Wet cupping, Inflammatory markers, Antioxidants, IL-6, IL-10

*Bahrain Med Bull 2022; 44 (3): 1025 - 1030*

---

\* Human physiology  
Department of Medical Laboratory Sciences  
Faculty of Science, Mutah University  
Jordan  
E-mail: Nafitawa77@gmail.com; nafitawa77@mutah.edu.jo