

Editorial Commentary: Is Medical Ozone Therapy Beneficial in the Treatment of Knee Osteoarthritis?

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Abstract

Osteoarthritis is a degenerative joint disease that is difficult to manage and a major cause of disability in the elderly population. The use of ozone for treatment of knee osteoarthritis (KOA) is controversial and of interest. Although the exact mechanism of ozone for the treatment of KOA is not fully understood, it has been shown that ozone administration may promote oxidative preconditioning or adaptation to oxidative stress, which in turn will result in the stimulation of antioxidant endogenous system which prevents tissue damage. A number of European studies show ozone injection for treatment of KOA results in pain relief, disappearance of edema, and improved mobility. Dosages and volume of injections vary among studies, risk of bias is generally high, and outcomes are inconsistent and not uniformly excellent. At present, there is insufficient evidence to support the effectiveness of ozone therapy for KOA.