

**OZ-PO-038: MUSCLE pO2 MODIFICATION BY OZONETHERAPY.**

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There are few studies about action's mechanisms of ozonotherapy (O3T). We analyze their effect on oxygen partial pressure in tibialis anterior muscle. 25 subjects were studied no patients were treated for ischemic disorders in legs. Hyperbaric Ozone was applied by autohemotherapy, 3 alternating days over one week. Muscular pO2 (in mmHg) was measured by polarographic probes, four times. There results are: 1) 150 - 200 determinations every time Pooled data of pO2 (Kruskal-Wallis test): significant increase of muscle pO2:  $p < 0.001$ . 2) Correlation between individual "Increase Factor of pO2" and "initial median pO2 value" was inverse and significant (Spearman's rho = - 0.796,  $p < 0.001$ ). 3) Inverse Correlation between "Age" and "Increase Factor pos3" (rho = - 0.541,  $p = 0.005$ ). 4) Linear Regression study showed dependence of "Increase Factor pos3" with the "inverse of initial pO2 value": adjusted R2 = 0.567,  $p < 0.001$ . There was a marginal dependence with "Age":  $p = 0.075$ . Ozonotherapy increases pO2 in most ischemic muscles and therefore might be useful to improve oxygenation in ischemic tissues.