Correlation between intraocular pressure (IOP) and intracranial pressure (ICP) in dog.

M Mehdizadeh, M Mosallaei, EA Alibai, MR Razeghinejad, AR Sheikhi, M Alirezaee, N Tanideh, D Mehrabani

Abstract

To evaluate correlation between intraocular pressure (IOP) and intracranial pressure (ICP) 15 mature dogs were divided into three equal groups. Under general anesthesia, the IOP and ICP were determined. Group 1 received timolol, group 2 latanoprost and group 3 underwent trabeculotomy in a single eye. After 2 and 4 weeks, the IOP and ICP were measured again. Before any drug administrations or surgery, the correlation between primary IOP and primary ICP was not significant (P>0.05) but after 2 and 4 weeks, there was a considerable negative linear correlation between these two measures (r=−0.595; P=0.01) and (r=−0.570; P=0.02), respectively. There was a negative linear correlation between IOP and ICP (r=−0.67; P=0.001) when the multiple regression formula was applied to make a model.