Dokumenttyp:  journal article
Autor(en) des Beitrags:  Nagel, E; Vilser, W; Lanzl, I
Titel des Beitrags:  Functional analysis of retinal vessel diameter reaction to artificially raised intraocular pressure in glaucoma patients with and without dorzolamide therapy.

Abstract:  BACKGROUND: Examination of the influence of dorzolamide on the autoregulation of retinal vessel diameter in glaucoma patients. PATIENTS AND METHODS: Eleven patients with primary open angle glaucoma (age 60 +/- 11) without medication and four weeks after starting therapy with dorzolamide eye drops three times daily were examined in the study. Short-time rise of intraocular pressure (IOP) was obtained via suction-cup. Functional reaction of the diameter of a segment of a retinal artery and corresponding vein were assessed by retinal vessel analyzer. RESULTS: Dorzolamid lowered the IOP from 23.3 +/- 1.3 to 17.6 +/- 2.2 mmHg (p = 0.004). Therapy did not influence the absolute diameter of retinal vessels regarding maximal dilatation caused by the pressure rising provocation. In eyes with treatment the diameter decreased faster to baseline values (arteries 100 sec, veins 220 sec) compared to those without treatment (arteries 350 sec, veins 480 sec). CONCLUSION: Dorzolamid might possibly be able to accelerate autoregulation of retinal vessels in response to short term artificial IOP increase.

Zeitschriftentitel / Abkürzung:  Vasa
Jahr:  2002
Band:  31