



## Closing the eyes as an alternative for nasolacrimal duct occlusion

### ***The Science behind the Tip***

Manual nasolacrimal occlusion after eye drop instillation is often taught to glaucoma patients because of the belief that to do so will enhance the intraocular pressure (IOP) lowering effect and reduce systemic absorption of glaucoma medications. By impeding lacrimal drainage the contact time of the topical medication with the ocular surface will be prolonged and so ocular absorption and drug efficiency improved. A greater IOP lowering effect has been shown to occur when punctal plugs were placed in the inferior puncta<sup>1,2</sup> or when pressing on the medial canthus for 5 minutes with a fingertip<sup>3-5</sup>.

However, from clinical evidence and from the lacrimal literature we know that tear drainage is dependent upon the blinking mechanism<sup>3,6</sup>. During each blink the pretarsal orbicularis muscle contracts and tears are propelled through the canaliculi into the lacrimal sac. Avoiding orbicularis action will thus reduce lacrimal drainage. Teaching your patient to simply close both eyes and keep the eyelids still for 3 to 5 minutes, should have a similar effect as manual occlusion of the canaliculi<sup>5</sup>.

### ***References***

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