



**The side effects of timolol and other beta-adrenergic antagonists on the cardiovascular and pulmonary system in predisposed patients should not be underestimated**

***The Science behind the Tip***

Since 1976 beta-adrenergic antagonists have established their role in the effective lowering of the intraocular pressure. The potential side effects of this locally administered drug are measurable even in otherwise completely healthy individuals<sup>1</sup> and in some predisposed patients these unwarranted effects can be severe. The fact that cells with  $\beta$ -adrenergic receptors are widely distributed within the human body explains the pharmacodynamic effects of timolol maleate<sup>2</sup>. Even one drop of timolol can lead to decompensation in an asthma patient.

If a patient has cardiovascular or pulmonary health issues, the general practitioner should be informed before prescribing beta-adrenergic antagonists, or alternative pressure lowering drugs should be considered<sup>3</sup>.

***References***

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- 2) Moshetova LK, Soshina MM, Sychev DA, Turkina KI. Pharmacogenetics of timolol. Vestn.Oftalmol. 2019 ;135(3) :137-143
- 3) Litoriya A, Saran Tiwari U, Pathak R. Effect of various topical anti glaucoma drugs on cardiopulmonary system. A prospective Study. Rom J Ophthalmol. 2019 ; 63(2)