

☒ **Intravitreal steroids should be used with caution in patients with glaucoma**

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

In recent years it has become common practice to inject steroids into the vitreous to reduce macular oedema or ocular inflammation. In 25 - 40% of individuals this causes a rise in intraocular pressure that peaks at 2 months and returns to normal within 4 - 6 months<sup>1</sup>. Less than 2% need intervention in the form of laser trabeculoplasty or trabeculectomy<sup>1,2</sup>. However, this hypertensive response is more likely to occur in patients with glaucoma or a family history of this condition. Other risk factors include youth, high myopia and connective tissue disease<sup>3</sup>.

The mechanism responsible for the steroid response is not known, but there is laboratory evidence to suggest that myocilin gene induction is involved<sup>4</sup>.

### ***References***

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2. Rubin B, Taglienti A, Rothman RF, *et al*. The effect of selective laser trabeculoplasty on intraocular pressure in patients with intravitreal steroid-induced elevated intraocular pressure. *J Glaucoma*. 2008;17:287-92.
3. Shields Textbook of Glaucoma: sixth edition Ed: Allingham R ; Lippincott Williams & Wilkins 2011 p346.
4. Clark AF, Steely HT, Dickerson JE, *et al*. Glucocorticoid induction of the glaucoma gene MYCO in human and monkey trabecular meshwork cells and tissues. *Invest Ophthalmol Vis Sci*. 2001;42:1769-80.