Check intraocular pressure up to several months after intravitreal injection of triamcinolone acetonide

The Science behind the Tip

Intravitreal injection of triamcinolone acetonide (TA) is a relatively novel component of treatment of intraocular edematous or neovascular disease. After injection of about 20 to 25 mg TA intraocular pressure (IOP) readings higher than 21, 30, 35 and 40 mm Hg were measured in about 41, 11, 6, and 2% of patients, respectively. This IOP elevation could be treated with glaucoma medications in all but 1% of the eyes, for which filtering surgery became necessary.

IOP started to rise 1 week after injection, and returned to baseline values only after about 8 to 9 months! Younger age was significantly (p=0.01) associated with TA-induced IOP increase. There was no association with gender, refractive error, preoperative visual acuity, diabetes mellitus, and preoperative diagnosis of glaucoma. It has been reported that intravitreal TA-related cataracts are associated with TA-induced IOP elevation.

If TA was re-injected, the IOP change was similar to the one after the first injection without signs of marked tachyphylaxis.

References