

Intraoperative intraocular triamcinolone injection for the treatment of post-cataract surgery inflammation in patients with juvenile idiopathic arthritis-associated uveitis

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Background: To assess the safety and efficacy of a single intraoperative intraocular injection of triamcinolone acetonide during cataract surgery in patients with juvenile idiopathic arthritis (JIA)-associated iridocyclitis to control postoperative inflammation and to avoid the need for additional systemic steroids.

Methods: The charts of 12 JIA patients (8 girls and 4 boys) with chronic iridocyclitis undergoing lensectomy and anterior vitrectomy via limbal incision were reviewed. Triamcinolone acetonide (4 mg) was injected into the anterior chamber and vitreous at the end of the surgery. No intraocular lenses were implanted. Postoperatively, 1% prednisolone acetate eye drops were given. Main outcome measures included intraocular inflammation, need for additional systemic steroids and intraocular pressure (IOP) elevation.

Results: Mean age was 10.6 (SD 3.1) years, and mean follow-up was 5.4 (SD 2.6) months. All patients were on systemic immunosuppression (methotrexate n=12, cyclosporine A n=1, low-dose prednisolone n=3) before surgery, and the medication was continued postoperatively. Fibrin formation or IOP elevation was not noted after surgery. Additional systemic steroids were not required in any of the patients. All patients showed improvement of visual acuity.

Conclusions: Intraoperative intraocular injection of 4 mg triamcinolone acetonide and additional 1% prednisolone acetate eye drops may be safe and effective to control postoperative inflammation after cataract surgery in JIA patients with iridocyclitis.

Disclosure of financial interest: None