

R1  R2  R3  PG0  PG1  Estagiário  Tecnólogo  PIBIC

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Service (sector)

Retina and Vitreous

Nº CEP

### **Tunneled scleral incision to prevent vitreal reflux after intravitreal injection**

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Purpose: To investigate the efficacy of tunneled scleral incision compared with standard straight scleral incision to prevent vitreal reflux after intravitreal (IVT) injection.

Design: Prospective comparative controlled non-randomized clinical study

Methods: Eighty-eight eyes undergoing IVT-injection were allocated into four groups to compare the the vitreal reflux after injection of 0.1 ml of triamcinolone acetonide (TA) and Avastin using a tunneled versus straight injection technique. The amount of intra-operative drug reflux was estimated by measuring the width of the subconjunctival bleb.

Results: The mean measured reflux of volume was statistically less with the tunneled scleral incision (1.13 mm SD± 1.16 for TA; 1.13 mm SD± 1.39 for Avastin) than in eyes undergoing the straight scleral injection (3.00 mm SD± 1.77 for TA; 3.18 mm SD± 1.68 for Avastin) for both Avastin and TA IVT-injections groups ( $P < 0.001$ ).

Conclusions: The tunneled scleral incision promotes statistically significant less vitreal reflux for IVT drug injection.