



RANDOMIZED CONTROLLED TRIALS OF THERAPY IN GLAUCOMA: THE COLLABORATIVE INITIAL GLAUCOMA TREATMENT STUDY (CIGTS)

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The Collaborative Initial Glaucoma Treatment Study (CIGTS) is a multicenter, randomized clinical trial in which 607 newly-diagnosed open-angle glaucoma patients were initially treated with topical medications or trabeculectomy (with or without 5-fluorouracil). An individualized target intraocular pressure (IOP) was calculated for each patient based on his/her pretreatment IOP and CIGTS visual field score. The mean IOP was reduced from 28 mm Hg to between 17 and 18 mm Hg (~ 35% reduction) in the medical group and from 27 mm Hg to between 14 and 15 mm Hg (~ 48% reduction) in the surgical group. Among patients with at least eight visits between 6 and 60 months, target IOPs were always achieved in 8% of the medical group and 40% of the surgical group. Visual acuity, visual field, and quality of life outcomes were relatively similar between the two groups after 4- to 5-year followup. The apparent discordance, particularly with respect to visual fields, between the CIGTS findings and those of the Moorfields' Laser Trabeculoplasty, Medical Therapy, and Trabeculectomy Trial will be discussed, with reference to patient demographic, ocular characteristic, and study design issues that may contribute to the observed differences.

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