

Pengaruh pemberian suplementasi mirtogenol terhadap perubahan ketebalan lapisan serabut saraf retina dan lapang pandang pada glaukoma primer sudut terbuka = The effect of mirtogenol towards the changes in retinal nerve fiber layer thickness and visual field in primary open angle glaucoma

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Abstrak

[ABSTRAK

Tujuan: Untuk mengevaluasi pengaruh pemberian suplementasi Mirtogenol terhadap perubahan ketebalan lapisan serabut saraf retina dan lapang pandang pada pasien dengan glaukoma primer sudut terbuka (GPSTa) dengan tekanan intraokular (TIO) terkontrol.

Metode: Penelitian ini merupakan penelitian prospektif, acak, tersamar ganda. Empat puluh satu pasien dengan GPSTa dengan TIO 18 mmHg diacak untuk mendapatkan Mirtogenol atau plasebo. Perubahan ketebalan RNFL dan MD lapang pandang diperiksa sebelum penelitian, 4 minggu serta 8 minggu setelah pemberian obat. Efek samping pengobatan ditanyakan kepada pasien selama penelitian.

Hasil: Rerata ketebalan RNFL kelompok Mirtogenol mengalami penurunan sebesar -0.70 ± 1.63 m dari 87.29 ± 19.39 m di awal penelitian menjadi 86.58 ± 19.43 m setelah 8 minggu, namun perubahan yang terjadi tidak bermakna secara statistik ($p=0.121$). Rerata ketebalan RNFL kelompok plasebo mengalami penurunan sebesar -1.74 ± 1.79 m dari 97.14 ± 17.19 m di awal penelitian

menjadi 95.40 ± 18.56 m setelah 8 minggu, perubahan yang terjadi bermakna secara statistik ($p < 0.001$).

Rerata MD lapang pandang kelompok Mirtogenol mengalami peningkatan 0.542 ± 1.93 dB setelah 8 minggu sedangkan rerata MD lapang pandang kelompok plasebo mengalami penurunan sebesar -0.083 ± 1.36 dB setelah 8 minggu. Namun perubahan rerata MD lapang pandang kedua kelompok tidak bermakna secara statistik ($p > 0.05$). Selama penelitian tidak didapatkan adanya efek samping.

Kesimpulan: Mirtogenol dapat mempertahankan ketebalan lapisan serabut saraf retina, dan MD lapang pandang pada pemberian Mirtogenol cenderung meningkat.

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ABSTRACT

Objective: To evaluate the effect of Mirtogenol towards the changes in retinal nerve fiber layer (RNFL) thickness and visual field in patients with primary open angle glaucoma (POAG) with controlled IOP.

Methods: This is a prospective, double blind, randomized study. Forty one POAG patients with IOP 18 mmHg were randomly assigned to receive either Mirtogenol or placebo. Changes in RNFL thickness and mean deviation of visual fields were evaluated before the treatment, as well as 4 weeks and 8 weeks after the treatment. Patients were asked for any side effects during the treatment period.

Results: The average RNFL thickness in the Mirtogenol group decreased 0.70 ± 1.63 m from 87.29 ± 19.39 m before the treatment to 86.58 ± 19.43 m after 8 weeks of treatment, however the change was not significant ($p=0.121$). The average RNFL thickness in the placebo group decreased -1.74 ± 1.79 m from 97.14 ± 17.19 m before the treatment to 95.40 ± 18.56 m after 8 weeks of treatment, the change was statistically significant ($p < 0.001$). The average MD of visual field in the Mirtogenol group increased 0.542 ± 1.93 dB after 8 weeks

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treatment while the MD of visual field in the placebo group decreased 0.083 ± 1.36 dB after 8 weeks of treatment. However the changes in MD of visual field was not significant ($p > 0.05$). No side effect was found throughout the study.

Conclusions: Mirtogenol seemed to maintain retinal nerve fiber layer thickness and increased mean deviation of visual fields.;Objective: To evaluate the effect of Mirtogenol towards the changes in retinal nerve fiber layer (RNFL) thickness and visual field in patients with primary open angle glaucoma (POAG) with controlled IOP.

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