

Prostaglandins Deepen Upper Eyelid Sulcus

Researchers in Tokyo retrospectively compared 250 eyes of 250 patients administered one of five types of prostaglandin eye drops to determine the frequency of appearance of upper eyelid sulcus deepening, finding that upper eyelid sulcus deepening most frequently occurred with bimatoprost usage.

Study participants were diagnosed with primary open-angle glaucoma or ocular hypertension. Five healthy patients were included as controls. One eye of each patient was treated with one of the following prostaglandin eye drops for > three months: latanoprost; travoprost; tafluprost; bimatoprost; and isopropyl unoprostone. A single-lens reflex camera was used to photograph open eyelids. Three ophthalmologists independently judged the appearance of the deepened upper eyelid sulcus in the photographs by comparing the right and left eyes. A subjective self-reported questionnaire was also administered.

Upper eyelid sulcus deepening was objectively (photograph) and subjectively (questionnaire) noted as follows: latanoprost, 24 percent and 12 percent; travoprost, 50 percent and 24 percent; tafluprost, 18 percent and 10 percent; bimatoprost, 60 percent and 40 percent; and unoprostone, 8 percent and 10 percent. It occurred more frequently (objectively and subjectively) in the bimatoprost group

than in the latanoprost, tafluprost and unoprostone groups ($p < 0.001$).

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DME Patients Report Improved Vision After Ranibizumab

Research from Australian, Canadian and European outpatient retina practices supports benefit from ranibizumab or ranibizumab plus laser treatment for patients with diabetic macular edema and provides vision-related, patient-reported outcome evidence that mirrors visual acuity outcomes.

Patients 18 years or older ($n=345$) with type 1 or 2 diabetes and visual impairment due to DME were enrolled in a Phase III, double-masked, 12-month study to determine the impact of intravitreal ranibizumab, 0.5 mg, compared with laser on patient-reported visual function. Patients were randomized to ranibizumab plus sham laser ($n=116$), ranibizumab plus laser ($n=118$) or sham injections plus laser ($n=111$). Ranibizumab and sham injections were given for three consecutive months, then as needed; laser plus sham treatment was given at baseline and then as needed. Outcomes were measured by National Eye Institute Visual Functioning Questionnaire 25 (NEI VFQ-25) scores at baseline, three and 12 months for patients receiving one or more study treatments with one or more post-baseline NEI

VFQ-25 assessments and last observation carried forward for missing data.

Mean baseline NEI VFQ-25 composite scores were 72.8, 73.5 and 74.1 in the ranibizumab, laser and ranibizumab plus laser groups. At 12 months, the mean composite scores (95 percent CIs) improved by 5 (ranibizumab vs. laser, 2.6 to 7.4; $p=0.01$ vs. laser) and 5.4 (ranibizumab plus laser vs. laser alone, 3.3 to 7.4; $p=0.004$ vs. laser) from baseline in the ranibizumab and ranibizumab plus laser groups, respectively, compared with 0.6 (-1.8 to 3) for the laser group. Near activities scores improved by 9 (ranibizumab vs. laser, 5 to 13; $p=0.01$) and 9.1 (ranibizumab plus laser vs. laser, 5.6 to 12.6; $p=0.006$) compared with 1.1 (-3 to 5.2) for the laser group, whereas distance activities score improved by 5.3 (ranibizumab vs. laser, 1.8 to 8.9; $p=0.04$) and 5.6 (ranibizumab plus laser vs. laser, 2.3 to 9; $p=0.03$) compared with 0.4 (-3.1 to 3.8) for the laser group. Patients with better baseline visual acuity or lower central retinal thickness had greater improvements with ranibizumab treatment compared with laser in composite and some subscale scores compared with patients with worse visual acuity or higher central retinal thickness.

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Mitchell P, Bressler N, Tolley K, Gallagher M, et al.