

Epimacular brachytherapy for wet AMD: 24 months results

Authors: TL Jackson, M Farah, JP Duprat, M Avila, GY Fujii, J Rossi, A Santos, R Palank , J Nau, London, UK

Advantages:

Epimacular brachytherapy (EMB) offers a novel, durable, costeffective treatment for age-related macular degeneration.

Methods:

Patients with classic, mixed or occult choroidal neovascularisation (CNV) underwent a pars plana vitrectomy followed by 24 Gy beta irradiation of the CNV lesion using a Strontium 90 source housed in an endoscopic probe, and held above the macula for 4 to 5 minutes. Patients were randomized to one of two regimens of concomitantly delivered intravitreal bevacizumab (1.25 mg). Group I (n=12) received the drug prior to surgery (10 +/- 4 days) and at one month post surgery. Group II (n =22) received the drug intraoperatively and at one month post surgery. ETDRS best-corrected visual acuity, full biomicroscopic examination, fluorescein angiography, and optical coherence tomography were carried out at baseline and monthly thereafter.

Effectiveness / Safety:

34 patients were enrolled and followed for 24 months. There was no significant different in outcome comparing Group I and Group II. All available data for subjects that reached the 24 month visit (n=20) were analyzed: 65% of patients lost fewer than 15 letters, 50% gained 0 or more letters, 30% gained 15 or more letters, and 20% gained 30 or more letters. One retinal tear was treated with laser, with no sequelae. Of phakic eyes, 25% developed a cataract. There are no reports of radiation retinopathy to date.

Take home message:

EMB produces a durable therapeutic effect that offers patients an alternative to regular intravitreal injections.