IMMUNOCROMATOGRAPHIC ASSAY FOR HERPETIC EPITHELIAL KERATITIS

Inoue et al evaluated immunocromatographic assay (ICGA) kit to diagnose herpes simplex virus infection by comparing it with immunofluorescence assay (IFA) and real-time PCR. Corneal scrapings were collected from 117 patients (77 with herpetic keratitis; 40 controls). The positive concordance between clinical diagnosis and ICGA was 47% and the negative concordance was 100%. The positive concordance between ICGA and PCR and IFA was 57% and 61%, respectively. The negative concordance between ICGA and PCR and IFA was 100%. The positive concordance between ICGA and PCR was 100% and 83%, respectively. The ICGA kit has moderate sensitivity and high specificity, indicating clinical utility in the diagnosis of herpetic epithelial keratitis.

PULSED INTRAVENOUS CYCLOPHOSPHAMIDE AND METHYLPIREDNISOLONO FOR SEVERE OCULAR INFLAMMATORY DISEASE

Khan et al reported efficacy and patient tolerance of a validated regime of pulsed intravenous cyclophosphamide and methylprednisolone (PICM protocol) for 26 patients with severe inflammatory eye disease (43 eyes; 22 uveitis, 21 scleritis/sclerokeratitis). PICM protocol, comprised of intravenous cyclophosphamide 15 mg/kg, intravenous methylprednisolone 10 mg/kg, maximum nine pulses over 20 weeks supplemented with low-dose continuous oral prednisolone. In the scleritis/sclerokeratitis group, 71% achieved success or partial success at 6 and 12 months vs 41% in the uveitis group. Two patients had adverse events requiring treatment withdrawal. This PICM protocol is a well-tolerated regimen for managing severe ocular inflammation and appears particularly useful in patients with scleritis/sclerokeratitis.

SAFETY OF RANIBIZUMAB IN CLINICAL PRACTICE

Holz et al evaluated 1-year safety profile of intravitreal ranibizumab 0.5 mg in neovascular age-related macular degeneration within routine clinical practice derived from data collected under LUMINOUS programme. Data of 4444 patients from registries in Germany (n=3470), the Netherlands (n=243), Belgium (n=260) and Sweden (n=471) were retrospectively pooled. 70% - 84% of enrolled patients completed 1 year of follow-up. Frequently observed ocular events were retinal pigment epithelial tears (27 patients; <1%) and intraocular pressure-related events (12 patients; <0.3%). Most frequent non-ocular event was stroke (19 patients; 0.4%). Overall, ranibizumab demonstrated favourable 1-year safety profile in routine clinical practice.

MICROVASCULAR TRANSPLANTATION OF SUBMANDIBULAR GLAND FOR SEVERE KERATOCONJUNCTIVITIS SICCA

Qin et al assessed the feasibility of microvascular autologous transplantation of partial submandibular gland (SMG) to prevent or reduce epiphora in severe keratoconjunctivitis sicca (KCS). 39 patients (42 eyes) with KCS were randomised to undergo transplantation of partial (22 eye) or total SMG (20 eyes). All transplanted SMGs survived. Symptoms of dry eyes disappeared and all patients were able to discontinue use of artificial tears. Severe epiphora occurred in 6 eyes with partial and in 19 eyes with total SMG transplantation. Surgical reduction was performed in 6 eyes and 18 eyes undergoing partial or total SMG transplantation, respectively. Transplantation of partial SMG alleviates the symptoms of dry eye and significantly reduces the incidence of severe postoperative epiphora.

FEMTOSECOND LASER AND MICROKERATOME-ASSISTED DESCemet STRIPPING AUTOMATED ENDOTHELIAL KERATOPLASTY

Rosa et al performed Descemet stripping automated endothelial keratoplasty (DSAEK) using a novel technique to obtain very thin (<100 μm) posterior corneal disks. 25 DSAEK grafts were prepared with two sequential cuts: the first cut, of variable thickness, was made with a femtosecond laser and the second with a 300 μm microkeratome head. There were no irregular cuts or perforations during tissue preparation. Central graft thickness was 79.6 and 69.3 μm at 3 and 6 months. Donor endothelial cells averaged 2675 cells/mm² preoperatively and 1729 cells/mm² at 6 months. There were no graft detachments. This new technique consistently yielded very thin grafts (<100 μm), excellent visual acuity results, and good endothelial cell counts.

INJECTION FREQUENCY AND RESPONSE TO BEVACIZUMAB MONOTHERAPY FOR DIABETIC MACULAR OEDEMA

Sivaprasad et al explored parameters that influence injection frequency of intravitreal bevacizumab for diabetic macular oedema by preforming post hoc analysis of the patients from a prospective randomised trial of intravitreal bevacizumab or laser therapy in the management of diabetic macular oedema (BOLT study). Good long-term response was predicted by resolution of macular oedema by 4 months. Approximately 20% of patients with persistent oedema at 12 months achieved a dry macula and 50% gained more than 15 letters at 24 months with sustained treatment, suggesting that oedema at 4 or 12 months should not be used as a stopping criterion for treatment.

EPIRETINAL MEMBRANE PEELING COMBINED WITH CATARACT SURGERY

Yiu et al compared functional and anatomical outcomes after idiopathic epiretinal membrane (ERM) peeling combined with phacoemulsification and intraocular lens implantation versus ERM peeling alone in a retrospective, non-randomised comparative case series of 81 eyes from 79 patients. Mean logMAR visual acuity improved and mean CMT decreased significantly in both groups after surgery with our statistical difference. Moreover, the rates of complications, including IOP elevation, ERM recurrence and frequency of reoperation were similar in the two groups. Combined surgery for ERMs and cataracts may potentially be as effective as membrane peeling alone with respect to visual and anatomical outcomes.