

Vitreoretinalna kirurgija, Friday, May 16 2025, 16:30-17:30

Location: dvorana Grandis

Session: Vitreoretinalna kirurgija / Vitreoretinal surgery

Chairs: Mojca Globočnik Petrovič and Neža Čokl Jenko

OR-056

Ocular trauma with intraocular foreign body; a retrospective case series

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PURPOSE: To investigate intraocular foreign body (IFB) characteristics, tissue damage caused by it and the timing and course of surgical care and to evaluate their influence on visual outcome for patients with IFB trauma.

METHODS: 31 patient (31 eyes) with IFB ocular trauma, treated at Department of Ophthalmology University Medical Centre Ljubljana in years 2020-2024 were included. All had IFB removed either as part of primary or secondary surgical care. The length, shape and type of the foreign body were noted, location, size and shape of its entry site, the final location of IOF in the eye; iris, lens and retinal injury; presence of endophthalmitis, timing of primary and secondary surgical care, IFB removal approach, the need for later surgical interventions, best corrected visual acuity (BCVA) at presentation and 6 months after last surgical intervention.

RESULTS: 29/31 of IFB were metal, 2/31 organic (wood); 21/31 flat, 3/31 linear, 10/31 round; 7/31 had max. length <2mm, 21/31 2-5mm, 3/31 >5mm. Central cornea entry wound in 4/31, eccentric in 17/31, sclera <6mm behind the limbus 5/31, sclera >6mm behind the limbus 5/31. Lens injury 17/31, iris injury 13/31, retinal detachment 5/31; final location in anterior segment 7/31, vitreous 8/31, retina 15/31. Mild endophthalmitis in 7/31. Primary surgery in 90% (27/30) in 3 days, with less than 25% of those (6/27) in 6 hour, secondary surgery with IFB removal in 26/27 in seven days; in 10 cases 2-7 day, in 11 in first 2 days, in 5 simultaneously with primary surgery. 4 only had primary surgery with IOF removal. IOF was removed through limbal incision in 14 cases, scleral incision in 10, entry wound in 2. Later surgical intervention in 13/31; cataract surgery in 3, implantation or reposition of artificial lens 5, vitrectomy for retinal detachment or silicon oil removal 6, corneal transplantation 1, enucleation 1. BCVA at presentation was >0,1 Snellen in 13/31, light perception to 0,05 Snellen in 17/31, no light perception in 1, it remained such after surgery. In group with preoperative BCVA of light perception to 0,05 Snellen final BVCA was >0,5 Snellen in more than 30%. Altogether final BCVA was >0,5 Snellen in almost 50% (14/31), in almost 20% (6/31) 1,0.

CONCLUSION: Most injuries were caused by flat metal foreign body of <5mm in length entering the eye through noncentral cornea, damaging lens and/or iris on the way and ending in the extramacular retina. The final visual outcome in case of properly timed and executed surgical care was good.

Poškodba očesa z intrabulbarnim tujkom: retrospektivna serija primerov

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NAMEN: Proučiti značilnosti tujka (CAIB), z njim povzročene poškodbe tkiv ter časa in poteka kirurške oskrbe ter oceniti njihov vpliv na funkcionalni izid pri bolnikih s poškodbo očesa s CAIB.

METODE: Vključenih je bilo 31 bolnikov (31 oči) s poškodbo s CAIB, obravnavanih na Očesni kliniki Univerzitetnega kliničnega centra v Ljubljani v letih 2020-2024. Pri vseh je bil CAIB odstranjen v sklopu primarne ali sekundarne kirurške oskrbe. Beležili smo dolžino, obliko in vrsto tujka, lokacijo, velikost in obliko vstopne rane, končno lokacijo tujka, prisotnost poškodbe irisa, leče in mrežnice, endoftalmitisa; čas primarne oskrbe in čas sekundarne oskrbe, pristop odstranitve tujka, potrebo po nadaljni kirurški oskrbi, najboljšo korigirano vidno ostrino (BCVA) ob sprejemu in 6 mesecev po zadnji operaciji. **REZULTATI:** 29/31 tujkov je bila kovinskih, 2/31 organska (les); 21/31 ploščatih, 3/31 paličastih, 10/31 kroglastih; 7/31 z dolžina najdaljše stranice <2mm, 21/31 2-5mm, 3/31 >5mm. Vstopna rana na roženici centralno pri 4/31, ekscentrično 17/31, sklera <6mm za limbusom 5/31, sklera >6mm za limbusom 5/31. Poškodba leče pri 17/31, irisa 13/31, odstop mrežnice 5/31; končna lokacija v sprednjem segmentu 7/31, v steklovini 8/31, na mrežnici 15/31. Začetni endoftalmitis pri 7/31. Primarna oskrba pri 90% (27/30) v 3 dneh, pri manj kot 25% teh (6/27) v 6 urah, sekundarna z odstranitvijo tujka pri 26/27 v sedmih dneh; pri 10 2-7 dan, pri 11 v prvih dveh dneh, pri 5 istočasno s primarno oskrbo. Pri 4 bolnikih je bila opravljena le primarna oskrba z odstranitvijo tujka. Odstranitev tujka skozi limbalni pristop pri 14, skozi skleralni pristop pri 10, skozi vstopno rano pri 2 bolnikih. Nadaljna kirurška oskrba pri 13/31; operacijo sive mrežnice 3, vstavitev ali

repozicijo umetne leče 5 , revitrektomijo zaradi zapletov ali odstranitve silikonskega olja 6, PKP 1, enukleacijo 1. BCVA ob sprejemu je bila $>0,1$ po Snellenu pri 13/31, dojem+ do 0,05 po Snellenu pri 17/31, negativen dojem svetlobe pri 1 in je tak ostal tudi po oskrbi. V skupini preoperativno dojem+ do 0,05 je bila končna BVCA $>0,5$ pri več kot 30%. Skupna končna BCVA $>0,5$ po Snellenu pri skoraj 50% (14/31), pri skoraj 20% (6/31) celo 1,0.

ZAKLJUČEK: Večina poškodb je bila povzročena s kovinskim ploščatim tujkom, dolžine <5 mm, ki je vstopil na roženici ekscentrično, na poti poškodoval iris in/ali lečo in pristal na mrežnici ektramakularno. Končni funkcionalni izid je bil v primeru pravočasne in primerne kirurške oskrbe dober.