OP-9

SUBCONJUNCTIVAL SILICONE OIL – PRESENTATION, HISTOLOGY AND SURGICAL MANAGEMENT

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Objective To describe the clinical and histological findings in subconjunctival silicone oil leakage, and a surgical technique for its management.

Method A 60-year-old woman with a chronic macula-off detachment underwent two pars plana vitrectomies four months apart. The silicone oil inserted during the first was replaced by heavy silicone (Oxane HD) at the second, with unsutured sclerostomy ports. One month later silicone oil cysts were noted under the conjunctiva.

Results Symptoms were grittiness, dryness and heaviness with occasional severe pain. Multiple oil globules 0.2–2mm in diameter were tightly packed beneath the conjunctiva in two quadrants, extending from limbus to peripheral bulbar conjunctiva.

Tenons tissue containing silicone globules was isolated by dissecting planes superficially, immediately beneath the conjunctival basement membrane, and deep, immediately above the sclera. The tissue sheet was mobilised and excised posteriorly at the junction with healthy tissue.

Histology revealed sheets of connective tissue with densely packed tiny lacunae, and intermittent large lacunae with occasional severe pain. Multiple oil globules 0.2–2mm in diameter were tightly packed beneath the conjunctiva in two quadrants, extending from limbus to peripheral bulbar conjunctiva.

Discussion Injectable medical grade silicone oil is only approved for intravitreal use. When injected into breasts, butyrate-producing bacteria such as Ruminococcus, Lachnospiraceae, Coprococcus, Roseburia, Oscillospiraceae UCG 003, 005, NK4A214 group (Log10 LDA score <2, FDR-adjusted p <0.05).

Conclusion Gut microbiome profiles between OcMMP patients (n = 49) and healthy controls (n = 40) were compared by extracting DNA from faecal samples and amplified for the V4 region of the 16S rRNA gene followed by Illumina MiSeq platform sequencing. Sequencing reads were processed using the bioinformatics pipeline available in the momtur v.1.44.1 software.

Results Using multivariable model and adjustment for participant factors, OcMMP cohort was found to be associated with lower number of operational taxonomic units (OTUs) and Shannon Diversity Index when compared to healthy controls. OcMMP OTUs were found to be significantly correlated with both the bulbar conjunctival inflammation score (p = 0.03) and the current use of systemic immunotherapy (p = 0.02). Linear discriminant analysis effect size scores found Streptococcus and Lachnoolostrium enriched in OcMMP. By contrast, healthy controls were enriched with Oxalobacter, Clostridia uncultured genus-level group (UCG) 014, Christensenellaceae R-7 group and butyrate-producing bacteria such as Ruminococcus, Lachnospiraceae, Coprococcus, Roseburia, Oscillospiraceae UCG 003, 005, NK4A214 group (Log10 LDA score <2, FDR-adjusted p <0.05).

Conclusion In conclusion, OcMMP patients have gut dysbiosis that correlated with bulbar conjunctival inflammation and the use of systemic immunotherapies. This provides a framework for future longitudinal deep phenotyping studies on the role of the gut microbiome in the pathogenesis of OcMMP.

REFERENCE


Poster abstract presentation

P-12 A CASE OF DESCMEET’S MEMBRANE DETACHMENT FOLLOWING PENETRATING KERATOPLASTY FOR KERATOCONUS

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Objective To present an uncommon case of Descemet’s (DM) detachment 20 years following PK for keratoconus. The detachment spontaneously resolved with conservative management.

To review the literature and published case reports for the clinical course, prognosis, and management employed for DM detachment following PK.

Methods and Analysis Case presentation of a patient presenting to our department and review of the literature.

Results Our patient presented with a spontaneous DM detachment 20 years after an uncomplicated PK for keratoconus. Imaging showed recurrence of corneal ectasia inferiorly, which would give this patient a poorer prognosis and higher risk of re-detachment after surgical intervention for the detachment.