

# Prize-winning poster presentation at the MMRSSOC National Undergraduate Conference, 17 February 2018

## The incidence and management of postoperative cystoid macular oedema: a retrospective audit

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**Introduction** Cystoid macular oedema (CMO) is a known complication of cataract surgery which causes poor visual outcome. The aim of this audit was to identify the incidence and to evaluate the management of postoperative cystoid macular oedema following cataract surgery carried out on patients between January 2014 and December 2016 in the University Hospital Wales.

**Methods** A literature search was completed to identify the current practices and national incidence rates. A total of 668 cases were identified from the electronic database as having suspected CMO, out of which 70 had a confirmed CMO diagnosis from optical coherence tomography and were the sample used for this study. Patient demographics, co-morbidity, management methods and visual outcome data were collected by retrospective case-note analysis.

**Results** The incidence of CMO was 0.66% (national rate = 1–2%). The male to female ratio was 51:49. The highest incidence was in the age range 70–74 years. A total of 87.5% of the patients received post-operative topical non-steroidal anti-inflammatories (NSAIDs) as treatment. There were perioperative complications in 29% of CMO cases; vitreous loss was the most common complication. A diagnosis of CMO was made within six months post-surgery in 98.6% of cases. Prophylactic use of NSAIDs was not regular clinical practice. A total of 63% of cases had visual acuity less than 0.5 LogMAR at the time of diagnosis, which was hence clinically significant.



**Conclusions** This study explored the current clinical practice and outcomes of cataract surgery in University Hospital Wales. The incidence of CMO was low. The importance of accurate record keeping, preoperative and postoperative checklists, and consideration of prophylactic NSAIDS were discussed. Re-audit needs to be done to analyse the long-term impact of CMO on visual acuity.