



Service Priorities and Programmes Electronic Presentations

Convention ID: 1102

Submitting author: Dr Oi Man Wong

Post title: Resident, Hong Kong Eye Hospital, NULL

Long Term Clinical Outcomes of Cataract Extraction in Patients with Primary Angle Closure Glaucoma– a Retrospective Study

Wong MOM(1)(2), Chan NCY(1)(2), Tham CCY(1)(2)

1. Department of Ophthalmology and Visual Sciences, The Chinese University of Hong Kong, Hong Kong SAR, People's Republic of China 2. Hong Kong Eye Hospital, Hong Kong SAR, People's Republic of China

Keywords:

cataract extraction

glaucoma

primary angle closure glaucoma

long term outcome

Introduction

Primary angle closure glaucoma(PACG) was a prevalent disease affecting 0.5% of global population. Conventional treatment includes laser iridotomy, followed by IOP control by medication or glaucoma filtration surgery. Randomised controlled trial has shown that cataract extraction provided IOP reduction comparable to trabeculectomy up to 24 months after surgery, with an average of 1.1 more drugs but less surgical complications than trabeculectomy. However, long-term evidence on the efficacy of lens extraction in lowering IOP in PACG patents beyond 2 years was scarce.

Objectives

To identify the long term clinical outcome of primary angle closure glaucoma(PACG) patients undergoing phacoemulsification

Methodology

Patients with history of cataract extraction were identified from a prospective PACG cohort. Medical records of the patients were retrospectively reviewed for the clinical outcome over a follow up period of 3 to 129 months. Main outcome measures were intraocular pressure(IOP), requirement of anti-glaucoma medication, surgical complications, additional procedures and treatment success rate. Continuous variables were compared with paired Student t-test where appropriate. Cumulative survival probability (with endpoint being treatment failure) was performed using Kaplan-Meier life table. A P value of <0.05 was considered statistically significant.

Result

Sixty-four eyes of 64 PACG patients underwent phacoemulsification and were followed up for 49.4+/-32.1 months. Intraocular pressure significantly reduced by 11.9 to 21.6% up to 6.5 years. Number of anti-glaucoma medication significantly reduced by 26.9% to 36.9% up to 5 years. After Holm-Bonferoni correction, the IOP reduction was significant up to 5.5 years, and medication reduction up to 4.5 years. Forty-five

patients (70.3%) had a decreasing trend in IOP during the follow-up period. Treatment failure was defined as the use of more anti-glaucoma medication at the follow-up than at baseline, or higher IOP than baseline if the no. of anti-glaucoma medication at follow-up is equal to baseline. Probability of success post phacoemulsification in PACG patients was 70.6% at 60 months. Six patients (9.4%) required additional procedures for IOP control, and 3 patients (4.7%) had surgical complications with long-term sequelae of requiring anterior chamber or sulcus intraocular lens implant. The study demonstrated the long-term effectiveness of lens extraction in treating PACG for up to 5.5 years.