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Letter to Editor

Ophthalmology Section

A Three Year Analysis of Systemic Comorbidities in Cataract Operated Patients in India

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Dear Editor,

India has a high prevalence of age related cataract that requires surgical intervention [1,2] and a rapidly increasing prevalence of Non-Communicable Diseases (NCDs) like diabetes mellitus, hypertension and cardiac diseases [3-5]. A retrospective analysis of medical case records was done to determine the prevalence of associated systemic comorbidity in patients operated for age related cataract at a tertiary eye care center in South India that performs around 900 cataract surgeries annually.

A small incision cataract surgery using phacoemulsification and topical anaesthesia was performed at the study hospital for 2,634 persons aged 20 to 90 years from January 2013 to December 2015, after control of any systemic illness. Most of the cataract operated patients were aged between 50 to 80 years (n=2,278, 86.48%) and 1,352 (51.33%) were females. Systemic comorbidities were identified preoperatively in 1,351 (51.29%) of operated patients, with more than one associated systemic comorbidity present in 516 (38.19%) out of these 1,351 patients. Diabetes mellitus (n=813, 60.18%) and hypertension (n=840, 62.18%) were the most common systemic comorbidity. Other comorbidities included cardiac disorders (n=203), bronchial asthma (n=60), thyroid disorders (n=34), renal diseases (n=1) and HIV + status (n=2).

The overall prevalence of systemic comorbidity showed an increasing trend over years (year 2013, 47.48%; year 2014, 51.03% and year 2015, 53.77%). The increasing prevalence was significant in those aged 20 to 39 years (from 6.67% in 2013 to 9.52% in 2015, $p<0.001$) and 41 to 50 years (21.43% in 2013 to 42.86% in 2015, $p<0.001$). Almost one in two subjects aged between 51 to 90 years reported a systemic illness over the three year study period without a significant change in prevalence from 2013 to 2015 (49.62% to 47.60% in 51 to 60 years, 47.21% to 58.59% in 61 to 70 years, 59.12% to 59.57% in 71 to 80 years and 42.11% to 52.63% in 81 to 90 years, all p-values were >0.05). There was no statistically significant difference by sex in systemic comorbidity ($p=0.35$). None of the operated subjects had an acute intraoperative or postoperative complication related to the systemic illness. The postoperative care of systemic comorbidity for all subjects was coordinated with their personal physicians.

In conclusion, the results of this study indicate a high prevalence of NCDs in patients operated for age related cataract with an associated systemic morbidity present in over half of the cataract operated patients. Ophthalmic surgeons have to investigate the presence of NCDs in patients with adult onset cataract, preferably in the initial outpatient visits, for early identification and adequate control of any identified systemic illness before surgery. Cataract surgery still remains a safe procedure with adequate preoperative and postoperative control of the systemic comorbidity co-ordinated with internists.

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