INCIDENCE AND RISK FACTORS OF INTRAOPERATIVE FLOPPY IRIS SYNDROM

S. Choi, H. Park
Department of Ophthalmology, Veterans Health Service Medical Center, South Korea

Purpose: To determine the incidence and risk factors of intraoperative floppy iris syndrome (IFIS) in patients undergoing cataract surgery. Methods: The present study includes 981 eyes of 655 patients who underwent cataract surgery, and the development and grade of IFIS were recorded for each eye. Correlation analysis was performed to determine the relationship between the IFIS and risk factors such as α1-adrenergic antagonist (tamsulosin, terazosin, alfuzosin), benzodiazepine, 5-α-reductase inhibitor, age, gender, hypertension, diabetes and glaucoma. Results: IFIS developed in 178 eyes (18.1%) out of 981 eyes. The correlations between the development of the IFIS and α1-adrenergic antagonist, benzodiazepine and male gender were significant. However, there was no correlation with 5-α-reductase inhibitor, age, gender, hypertension, diabetes or glaucoma. IFIS grade was higher as the cumulative dosage of the α1-adrenergic antagonist increased. Odds ratio of the patients using tamsulosin was the highest among the other risk factors, which was 3.8 times higher than the patients using terazosin, 9.0 times higher than the patients using alfuzosin and 11.1 times higher than the patients using benzodiazepine. Among patients who underwent cataract surgery on both eyes and who were confirmed with IFIS in one or both eyes, no significant grade differences between the two eyes were noted. Conclusions: α1-adrenergic antagonist and benzodiazepine were risk factors for the development of the IFIS, and as the cumulative dosage of α1-adrenergic antagonist increased, the probability of developing a higher grade of IFIS increased. Therefore, precautions are necessary in potential IFIS patients with the above-mentioned risk factors when preparing for a cataract surgery. Additionally, the IFIS development of the first eye could be utilized as a predictive value for developing IFIS in the fellow eye.