Title: INCIDENCE OF CRITICAL EVENTS IN THE INTRAOPERATIVE AND POST ANESTHESIA CARE UNIT (PACU) FOLLOWING EYE SURGERY

Presenters: Victoria Navarro, RN, MS, Richard Rivers, MD, PhD, MBA, Ruth Lee, RN, MS, MBA, DNP (c), Satish Kenchaiah, MD, MPH

Institution/Hospital: Johns Hopkins Hospital, Wilmer Eye Institute

Background: Most ophthalmic surgeries are elective in nature—vision threatening, but not life threatening. The incidence of critical events in patients undergoing eye surgeries is not well-known.

Purpose: To examine the incidence of critical events that requires closer medical/nursing observation in the intra-operative or immediate post-operative period of ophthalmic surgeries.

Methods: In a multicenter study, 1900 patients who underwent ophthalmic surgery were enrolled. Information on history, type of eye surgery, method of anesthesia, intra-operative medications, and critical events were collected on a standardized form.

Results: The mean age was 36 years (range <1 to 94 years); 51% were males. Based on American Society of Anesthesiology (ASA) classification of physical status, 29.7%, 48.5%, 19.6%, 0.7%, and 1.5% were classified as ASA Class I, II, III, IV, and emergency respectively. About two-thirds of the procedures were accounted for by corneal surgeries (20%), vitrectomy (15%), muscle procedures (18%), and examination under anesthesia (16%). Majority of patients received general anesthesia (92.4%). During the intra-operative period, frequent events were cardiovascular medication use (17.8%), bradycardia/tachycardia (1.6%), nausea/vomiting (1.1%), pain (1.1%), and obstruction of airway (0.8%). In PACU, events in order of frequency were pain (24.1%), nausea/vomiting (4.5%), delirium (1.8%), and obstruction of airway (0.8%).

Conclusions: In eye surgeries, whereas critical events requiring cardiovascular medications was most frequent in the intra-operative period, pain requiring treatment was most common in PACU.