ABSTRACT

A PROSPECTIVE, RANDOMIZED, BLINDED, COMPARATIVE STUDY ON THE EFFECT OF "LIBERAL VS. RESTRICTIVE" FLUID PROTOCOL ON POST-OPERATIVE NAUSEA VOMITING AND DISCHARGE CRITERIA IN PATIENTS UNDERGOING PUERPERAL STERILIZATION UNDER GA AS DAY CARE SURGERY

BACKGROUND : Adequate control of postoperative nausea, vomiting, pain, dizziness and thirst and early return to normal activity are important anesthetic goals in the context of ambulatory surgery. The aim of this study was to compare the effects of "liberal vs. restrictive" fluid protocol on post-operative nausea vomiting and discharge criteria in patients undergoing puerperal sterilization under GA as day care surgery.

MATERIALS AND METHODS : One hundred and two ASA PS 1 and 2 patients aged between 18 and 40 years, undergoing puerperal sterilization under GA as day care procedure and meeting inclusion criteria were drafted into the study. The patients were randomly assigned to one of two groups, each having 51 patients. Pre-operatively, Group R (Restrictive fluid protocol) patients received 2ml/kg of Ringer Lactate over 20 minutes. Group L (Liberal fluid protocol)

patients received 15 ml/kg of Ringer Lactate. A standard general anesthetic technique was used . Adverse postoperative outcomes were assessed at 2,6,12 and 24 hours post-operatively by an anaesthesiologist blinded to the study.

RESULTS : The incidence of Post –Operative Nausea and Vomiting (PONV), Pain, Thirst is significantly reduced in liberal fluid group group (**PONV** 2, 6, 12 hours "p" value = 0.0005 : **Pain** "p" value = 0.0005 : **Thirst** "p" value = 0.015) when compared to restrictive fluid group .The patients who received liberal fluid achieved discharge criteria earlier than those who received restrictive fluid ("p" value = 0.0005). No significant difference is found for headache, dizziness, drowsiness, fatigue, post-operative ileus, Post-opearative Exercise capacity and mobilization between both the groups.

CONCLUSION : Preoperative hydration effectively reduced PONV in patients presenting for ambulatory surgery. Hence I conclude that liberal fluid therapy is an inexpensive and safe therapy for reducing post-operative nausea and vomiting.

KEYWORDS : Liberal Vs Restrictive fluid Protocol, Post-operative Nausea and Vomiting, Discharge Criteria, Peri-operative fluid management.