

Restrictive or Individualized Goal-Directed Fluid Replacement Strategy in Ovarian

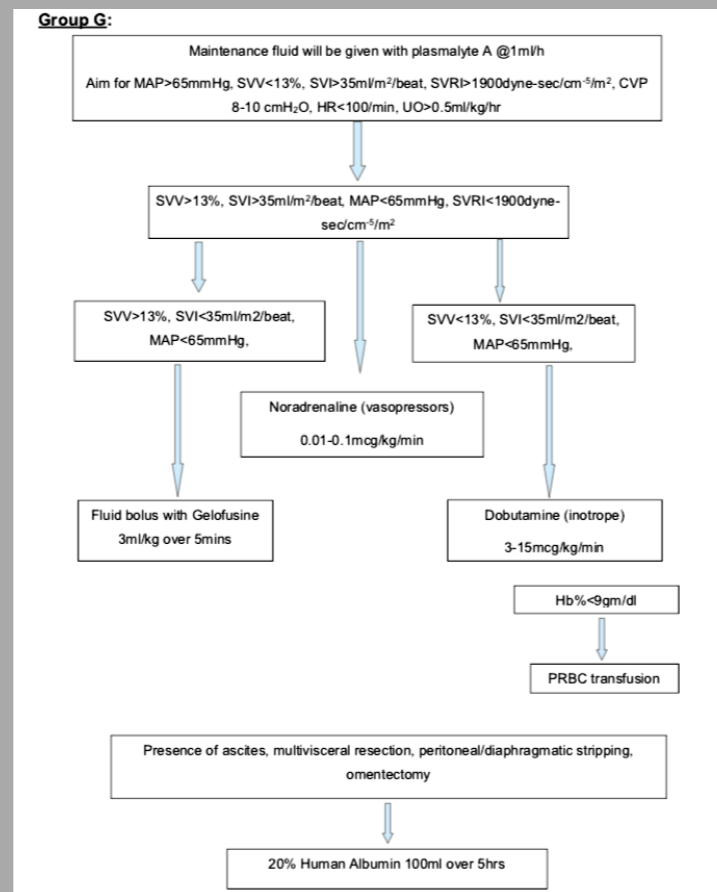
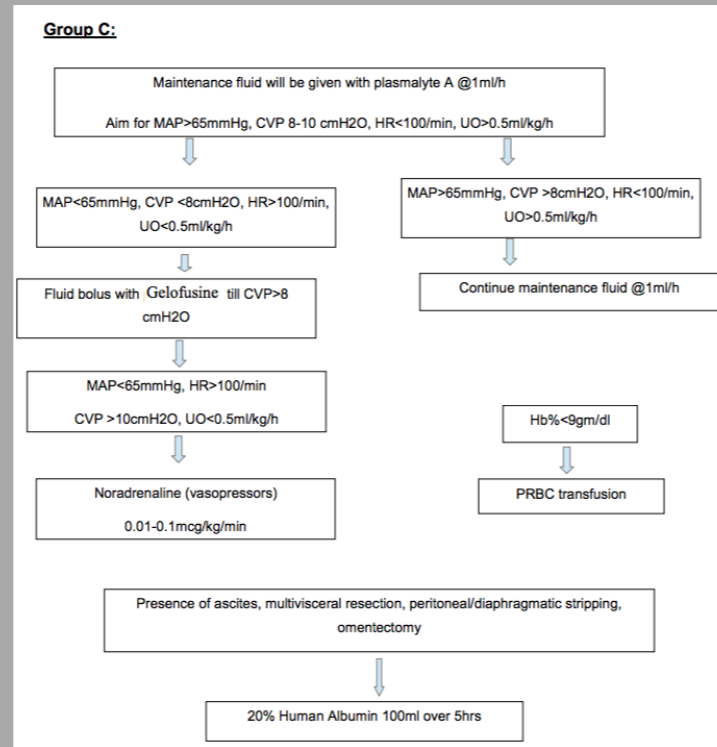
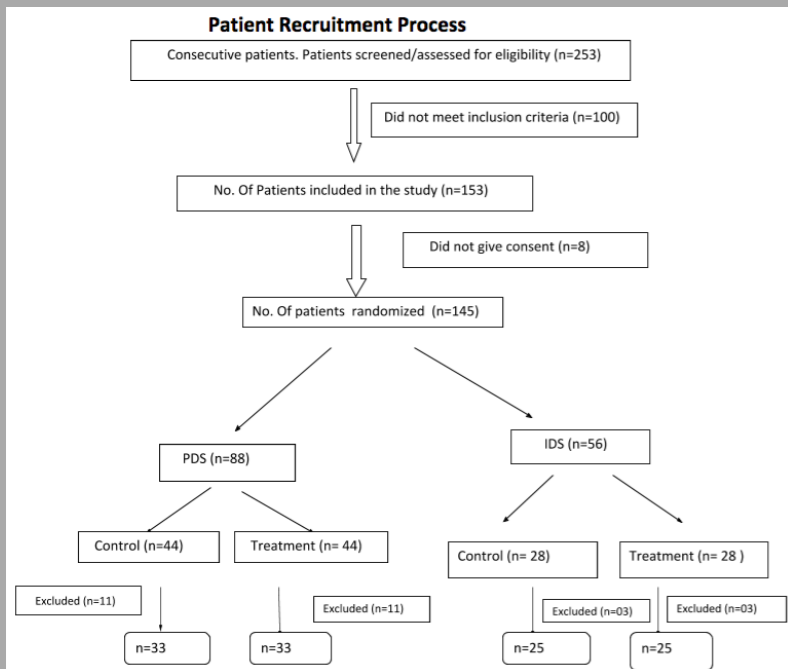
Cancer Cytoreductive Surgery– A prospective randomized controlled trial

Introduction

The aim of the study was to determine whether intra-operative SVV- guided fluid optimization during ovarian cancer cytoreductive surgery can reduce the postoperative length of stay (LOS) in the hospital, reduce postoperative morbidity and overall cost of treatment. We also examined whether it is more beneficial in primary cytoreductive surgery than interval cytoreductive surgery.

Study design

This prospective, double-blind, single-centre, parallel-group, randomized controlled trial was approved by the Institutional Review Board of Tata Medical Center (Kolkata, India). This study was registered at Clinical Trials Registry of India (REF/2016/01/010551) and at ClinicalTrials.gov (NCT03519165).



Results

Characteristics	Group C (n=58)	Group G (n=58)
Age in years (median)	54	51
BMI (mean)	25.70 (SD =4.97)	27.15 (SD=4.55)
Charlton score (mean)	3.97 (SD = 2.30)	3.91 (SD = 2.30)
ASA-PS (>2) (%)	1/58 (0%)	5/58 (7%)
Ca 125 at presentation (median)	804 (Range 17-19614)	521 (Range 12-8272)
SCS (>=8)	14/58 (30%)	18/58 (36%)
PCI score (mean)	14.80 (9.65)	14.95 (9.68)
IDS (%)	25	25
PDS (%)	33	33

Characteristics	Group C (n=44)	Group G (n=44)
IOF (median)	5606	5429
pH at the end of surgery <7.35 (%)	8/44 (18.18%)	5/44 (11.4%)
Lactate at the end of surgery (>1.5) (%)	30/44 (68.18%)	22/44 (50%)
LOS (median)	7.5	7
POMS day 3 (median)	4	3
Cost (mean)	404599 (200105-SD)	368840 (300947-SD)
Clavien-dindo (3-5) (%)	7/44 (16%)	5/44 (12%)

Conclusion

Intraoperative Goal directed fluid therapy in patients undergoing primary debulking surgery for ovarian malignancy have shown decreasing trend in LOHS, cost and overall morbidity as compared to restrictive fluid therapy in our study although the difference has not reached statistical significance.

References

- McKenny M, Conroy P, Wong A, Farren M, Glesson N, Walsh C et al. A randomised prospective trial of intra-operative oesophageal Doppler- guided fluid administration in major gynaecological surgery. *Anaesthesia* 2013; 68: 1224–31
- Chattopadhyay S, Mittal S, Christian S, Terblanche PAL, Patel A, Biliatis I et al. The Role of Intraoperative Fluid Optimization Using the Esophageal Doppler in Advanced Gynecological Cancer Early Postoperative Recovery and Fitness for Discharge. *International Journal of Gynecological Cancer* 2013; 23: 199-207