The use of clinical parameters to balance fluid restriction and a sufficient circulation in patients undergoing EPP was associated with a reduction in mean LOSI without increasing the incidence of postoperative complications" Bjerregaard et al (2015).

Reference:

Bjerregaard, L.S., Møller-Sørensen, H., Hansen, K.L., Ravn, J. and Nilsson, J.C. (2015) Using clinical parameters to guide fluid therapy in high-risk thoracic surgery. A retrospective, observational study. BMC Anesthesiology. 15(1), p.91.

Using clinical parameters to guide fluid therapy in high-risk thoracic surgery http://ctt.ec/8Dab6+ @ivteam #ivteam

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Abstract:

BACKGROUND: Despite extensive research, the debate continues as to the optimal way of guiding intraoperative and postoperative fluid therapy. In 2009 we changed our institutional guideline for perioperative fluid therapy in patients undergoing extrapleural pneumonectomy (EPP) and implemented the use of central venous oxygen saturation and intended low urine output to guide therapy in the early postoperative period. Here we evaluate the consequences of our changes.

METHODS: Retrospective, observational study of 30 consecutive patients undergoing EPP; 18 who had surgery before and 12 who had surgery after the changes. Data were collected from patient files and from institutional databases. Outcome measures included: Volumes of administered fluids, fluid balances, length of stays and postoperative complications. Dichotomous variables were compared with Fisher's exact test, whereas continuous variables were compared with Student's unpaired t-test or the Wilcoxon Two-Sample Test depending on the distribution of data.

RESULTS: The applied changes significantly reduced the volumes of administered fluids, both in the intraoperative ($p = 0.01$) and the postoperative period ($p = 0.04$), without increasing the incidence of postoperative complications. Mean length of stay in the intensive care unit (LOSI) was reduced from three to one day ($p = 0.04$) after the changes.

CONCLUSION: The use of clinical parameters to balance fluid restriction and a sufficient circulation in patients undergoing EPP was associated with a reduction in mean LOSI

without increasing the incidence of postoperative complications. Due to methodological limitations these results are only hypothesis generating.