We will conduct a systematic review aimed at evaluating the effects of restrictive perioperative fluid management strategies compared to liberal ones on clinically significant postoperative outcomes” Carrier et al (2018).

Abstract:

BACKGROUND: Liver transplant recipients suffer many complications, but few intraoperative interventions supported by high-quality evidence have been found effective to reduce their incidence or severity. Fluid balance has been proposed as an important aspect of perioperative care in high-risk recipients. We will conduct a systematic review aimed at evaluating the effects of restrictive perioperative fluid management strategies compared to liberal ones on clinically significant postoperative outcomes.

METHODS: We will search through major databases (CINAHL Complete, EMB Reviews, EMBASE, MEDLINE, PubMed, and the gray literature (CADTH, Clinical Trials, National Guideline Clearing House, NICE, MedNar, Google Scholar and Open Grey)), from inception up to a date close to the review submission for publication, for eligible studies. Randomized controlled trials and comparative non-randomized studies (prospective or retrospective) comparing two fluid management strategies (or two outcomes with available data on fluid volume received for observational studies) on adult liver recipients will be included. Eligible studies will have to report at least one postoperative complication or mortality. Our primary outcome will be acute renal failure and our secondary exploratory outcomes will be all other postoperative
complications and mortality. Study selection and data abstraction using an electronic standardized form will be performed by three authors. Risk of bias will be evaluated and data will be pooled if limited clinical diversity is observed.

DISCUSSION: Human organs available for transplantation are scarce resources. Strategies to improve recipients' survival are needed. We hypothesize that restrictive fluid management strategies will be associated with better postoperative outcomes than liberal fluid management strategies. This systematic review will improve our understanding of the available evidence and help us better inform future clinical trials.

SYSTEMATIC REVIEW REGISTRATION: This systematic review protocol is registered in PROSPERO ( CRD42017054970 ).

You may also be interested in...

- Perioperative fluid management in kidney transplantation
- Principles of fluid management and stewardship in sepsis
- Impact of fluid balance on sepsis outcomes

Reference: