Hémodynamique, SCA

ID: 201

Evaluation of perioperative albumin administration in major non-cardiac surgery: a Systematic Review and Meta-Analysis

M. Ait boukhlik*(1), A.Daghmouri*(2), B.Plaud(3), F.Depret(4), B.Deniau(5)

(1) Réanimation chirurgicale, Henri Mondor, Créteil, France , (2) Anesthésie, Hôpital André Grégoire, Montreuil, France , (3) Anesthésie-réanimation, Hôpital Saint-Louis, Paris, France , (4) Réanimation chirugicale - CTB, Hôpital Saint-Louis, Paris, France , (5) Réanimation chirurgicale - CTB, Hôpital Saint-Louis, Paris, France

**Auteur présenté comme orateur*

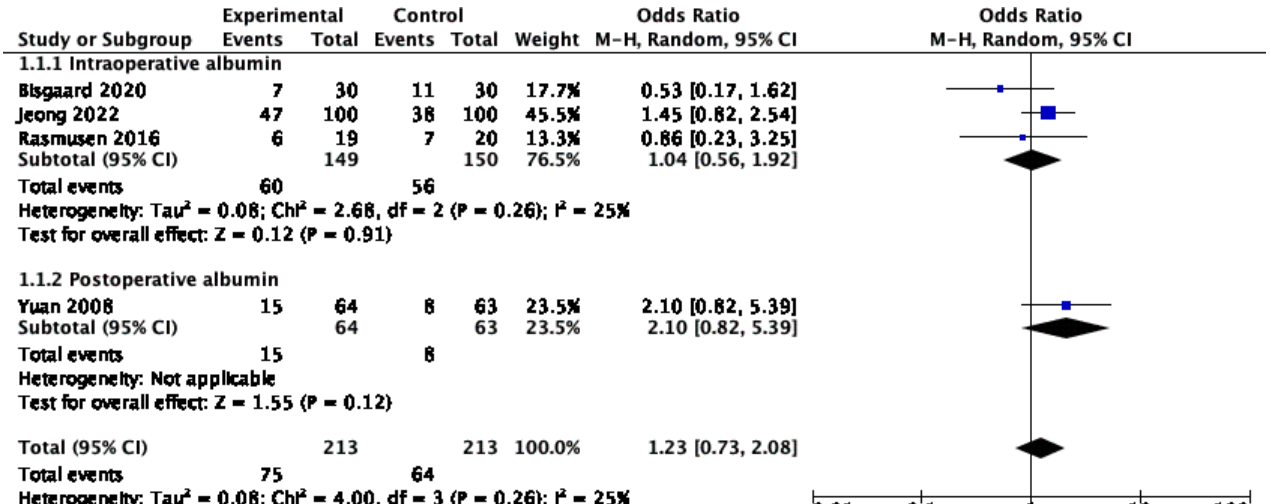
Position du problème et objectif(s) de l'étude:
Albumin use in critical care setting is still controversial [1,2]. Only few studies evaluated the use of albumin as a resuscitation fluid in perioperative setting. The aim of this systematic review and meta-analysis was to assess the efficacy and safety of perioperative albumin administration during major non-cardiac surgery.

Matériel et méthodes:
This study was registered in PROSPERO (ID: CRD42022353278). We performed an electronic search of the relevant literature from 2000 until 2023. The primary endpoint was the incidence of moderate postoperative complications (MPC) (defined by a Clavien-Dindo classification grade ≥ 2). Secondary endpoints were intraoperative fluid balance, intraoperative blood loss, postoperative wound infection and acute kidney injury (AKI).

Résultats & Discussion:
We identified four relevant studies involving 426 patients (213 patients in albumin group versus 213 patients in control group). The meta-analysis did not reveal any significant difference between both group regarding the incidence MPC even after subgroup analyses based on intraoperative or postoperative albumin administration (OR=1.23, 95% confidence intervals (CI) [0.73, 2.08],p=0.44) (Figure). No difference was found for intraoperative fluid balance (MD=-190.83, 95%CI [-408.67, 27.02], p=0.09), intraoperative blood loss (MD= -27.54, 95%CI[-225.55, 170.48], p=0.79) and postoperative wound infection (OR=1.91, 95%CI[0.98, 3.73], p=0.06). Moreover, albumin administration did not significantly increase the incidence of AKI (OR=2.02, 95%CI [0.90, 4.53], p=0.09).

Conclusion:
Our meta-analysis showed that perioperative administration of albumin during major non-cardiac surgery did not result in increased number of moderate postoperative complications.

Références bibliographiques:
[1] N Engl J Med, 2004, 350, 2247-2256 [2] N Engl J Med, 2014, 370, 1412-1421



Les auteurs déclarent ne pas avoir toute relation financière impliquant l'auteur ou ses proches (salaires, honoraires, soutien financier éducationnel) et susceptible d'affecter l'impartialité de la présentation.