EFFECTIVENESS OF UTERINE TAMPONADE DEVICES FOR REFRACTORY POSTPARTUM HAEMORRHAGE AFTER VAGINAL BIRTH: A SYSTEMATIC REVIEW

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Abstract

Objectives: to evaluate the effectiveness of uterine tamponade devices for atonic refractory postpartum haemorrhage (PPH) after vaginal birth, and the effect of including uterine tamponade devices in institutional protocols. Search strategy: databases in PubMed, EMBASE, CINAHL, LILACS and POPLINE. Study selection: randomised and non-randomised comparative studies. Outcomes: composite outcome including surgical interventions (artery ligations, uterine compressive sutures or hysterectomy) or maternal death, and hysterectomy. Results: all four included studies were at high risk of bias. The certainty of evidence rated as very low to low. One randomised study measured the effect of the the condom-catheter balloon compared to standard care and found unclear results for the composite outcome (RR 2.33, 95%CI 0.76-7.14) and hysterectomy (RR 4.14, 95%CI 0.48-35.93). Three comparative studies assessed the effect of including UBTs in institutional protocols. A stepped-wedge study suggested an increase in the composite outcome (RR 4.08, 95%CI 1.07-15.58), and unclear results for hysterectomy (RR 4.38, 95% CI 0.47-41.09) with the use of the condom-catheter or surgical glove balloon. One non-randomised study showed unclear effects on the composite outcome (RR 0.33, 95%CI 0.11-1.03) and hysterectomy (RR 0.49, 95%CI 0.04-5.38) after the inclusion of Bakri balloon. The second non-randomized study found unclear effects on the composite outcome (RR 0.32-2.81) and hysterectomy (RR 1.84, 95%CI 0.44-7.69) after the inclusion of Ebb or Bakri balloon. Conclusions: the effect of uterine tamponade devices for the management of atonic refractory PPH after vaginal delivery is unclear, as is the role of the type of device and the setting.

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