Abstract No. **16**
Category: **Prevention**
Title: **Evidence assessment on blood pressure management in spontaneous intracerebral hemorrhage: a scoping review**
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Abstract:

Background: Clinical practice guidelines (CPGs) recommend intensive antihypertensive reduction for the management of blood pressure in spontaneous intracerebral hemorrhage (ICH) patients. However, clinical trials (CTs) and systematic reviews (SR) published after the most recent CPGs, have issued different conclusions to the recommendations, maintaining the clinical debate on the decision of the best antihypertensive treatment.
Methods: We systematically searched CPGs, which have recommendations on blood pressure (BP) management in patients with ICH. Additionally, we searched SRs and CTs that assessed the safeness and effectiveness of the intensive compared to standard reduction treatment. The search was done in January 2019 in three databases, and there were no restrictions on language. Two independent authors selected the studies, extracted the information, and assessed the quality (AGREE-II for CPGs, AMSTAR-II for SRs, and RoB-2 for CTs).
Results: We included three CPGs, of which 2/3 had a score ? 60% in the domain 3 (rigor of development), and 1/3 had a score ? 70% in the overall evaluation of AGREE-II, 1/3 used the GRADE methodology. We included seven SRs, of which 3/7 had a score ? 11 in AMSTAR-II. In addition, 2/7 totally supported the intensive reduction, 4/7 partially supported the intensive reduction (it fails to improve clinical outcomes, its evidence is insufficient, but appears to be safe), and 1/7 did not recommend it (lack of evidence). 1/7 found that intensive reduction is associated with renal failure (RR=2.18; 95%IC: 1.08-4.41). We included nine CTs, of which 1/9 was not randomized, 5/9 were open-label, and 4/9 had a high risk of bias arising from the randomization process (RoB-2) in six outcomes. In 1/9 researchers used lisinopril and labetalol, in 1/9 nicardipine was used, and in 7/9 any available BP lowering agents were used. The population was small (< 100 patients) in 3/9 CTs, and 2/9 studied ? 1000 subjects.
Conclusions: Most of the evaluated CPGs did not take into account the patient's viewpoints, but did have a high score in the rigor of development domain. CPG supports the use of the intensive reduction, however, recent systematic reviews partially supported o did not support it. This can be due to the association with renal failure, and the risk of bias of assessed clinical trials. We proposed that using the intensive reduction can have the same effect as standard reduction, and may produce adverse effects in ICH patients, therefore standard reduction is the safest and most effective pathway to reduce high BP in ICH.