



The ongoing debate on anesthetic strategies during endovascular treatment: Can local anesthesia solve the puzzle?

Dear Editor,

We read the review by Rabinstein et al. with interest. The authors discussed factors related to poor functional outcomes despite good reperfusion in acute ischemic stroke patients treated with endovascular thrombectomy (EVT).¹ On the subject of anesthetic techniques during the intervention, the authors conclude that equipoise exists between conscious sedation (CS) and general anesthesia (GA) and large multicenter randomized trials are needed to determine whether or not CS and GA are equally safe and effective.

We think that focusing solely on CS and GA does not do justice to a simple and potentially safer anesthetic strategy: local anesthesia at the groin puncture site only (LA). The review mentioned the well-known trials (GOLIATH, SIESTA, ANSTROKE) that randomized between CS or GA during EVT and showed contrasting results.^{2–4} In the HERMES meta-analysis non-GA was superior to GA. However, the non-GA group was defined as the composite of local anesthesia (LA) at the groin puncture site only and CS.⁵ Therefore, the better functional outcomes in the non-GA arm might well be the result of patients receiving LA only. Recently, we compared the effect of LA only during EVT to CS and we reported better functional outcomes in patients receiving LA.⁶ Several mechanisms, present in both GA and CS (e.g. blood pressure drops, impaired airway reflexes), could explain poorer outcomes in the CS group. We think that these results should be taken into account when considering what is the optimal anesthetic approach during EVT. In our opinion, future trials should consider LA as one of the initial anesthetic strategies during EVT.

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