Association of local anesthesia versus conscious sedation with functional outcome of acute ischemic stroke patients undergoing embolectomy

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Purpose

Compare functional outcomes of acute ischemic stroke (AIS) patients undergoing embolectomy with either local anesthesia or conscious sedation. Secondly, identify differences in hemodynamic parameters and complication rates between groups.

Materials and Methods

Single institution, retrospective review of all AIS patients undergoing embolectomy between January 2014 and July 2018 (n=185). Patients receiving general anesthesia (n=27) were excluded. 111 of 158 (70.3%) composed the local anesthesia (LA) group, and 47 (29.7%) composed the conscious sedation (CS) group. Median age was 71 years (IQR 59-79). 78 (49.4%) were male. The median NIHSS score was 17.5 (IQR 11-21). Hemodynamic, medication, complication and functional outcome data were collected from the anesthesia and medical records. Good functional outcome was defined as a 3 month mRS <2. A multivariate analysis was performed to estimate the association of anesthesia type on 3 month mRS score.

Conclusion

Functional outcome of AIS patients undergoing embolectomy is similar for patients receiving local anesthesia and conscious sedation. This similarity may be beneficial to a future study comparing general anesthesia to LA and CS. The use of LA or CS does not significantly impact hemodynamic status.

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