Aim of the Study To compare the functional outcome at 6 months of interventional vs medical management in patients with BAVMs in a tertiary care hospital in Mexico.

Methods We performed a retrospective observational study at the Instituto Nacional de Neurología y Neurocirugía in Mexico City from January 2016 to October 2021. The population was classified according to the type of treatment in: embolization, surgery, radiosurgery and medical management. Functional outcome (FO) was assessed with the modified Rankin scale (mRs) at 6 months as good (0–2) or bad (3–6).

Results Of 320 patients (mean [SD] age, 36.4 [13.7] years; 189 women [59.1%]) with BAVMs, 174 (54.3%) presented with headache, 158 (49.3%) with seizures and 51 (15.9%) with intracerebral hemorrhage, and the most frequent Spetzler-Martin grading scale were II (98 [30.6%]) and III (105 [32.8%]). FO was good in: 43 (60.5%) of 71 embolized patients, 83 (77.5%) of 107 submitted to surgical resection and in 78 (83.2%) of 94 submitted to medical management. For 128 (40%) patients a one-stage procedure was performed in 14 (48.3%) patients, a two-stage – in 3 (10.35%). Subtotal thrombosing of AVM node was achieved in 7 (24,1%) patients. Later these nodes were surgically removed. 5 (17,2%) patients underwent radiosurgical treatment after subtotal AVM occlusion. A perioperative hemorrhage was registered in 1 patient that comprises 2.6% of the total number of endovascular procedures performed. The clinical outcomes in the majority of patients corresponded to mRS 0–1 (96.6%, n=28). A rough neurological deficit (total aphasia) in the postoperative period was noted in 1 patient (3.45%). In the series were no cases of mortality.

Conclusion Using PHIL as the only LEA during endovascular treatment of cerebral AVMs enables one to obtain good angiographic and clinical results. Application of this agent provides high primary radicality and reduces the number of endovascular stages to achieve expected AVM occlusion, which significantly decreases complication risks and radiation exposure for a patient.

REFERENCES

Do you have any conflict of interest to declare?: No

P42 ENDOVASCULAR TREATMENT OF BRAIN ARTERIOVENOUS MALFORMATIONS USING PRECIPITATING HYDROPHOBIC INJECTABLE LIQUID (PHIL)

Introduction Application of liquid embolic agents (LEAs) is a method of choice for endovascular treatment of cerebral arteriovenous malformations (AVMs).

Materials and methods Since January 2011, our team has treated 787 patients with cerebral AVMs in two large medical centers of Novosibirsk and Moscow. 41 (5.2%) of these patients were treated using only the PHIL agent (Spetzler-Martín I-III), in 29 (70.7%) of them the treatment was finalized and 12 (29.3%) are undergoing further treatment. In the presented paper, the results of the 29 patients are considered.

Results Radical endovascular AVM occlusion was achieved in 17 (58.6%) of the patients. A one-stage procedure was performed in 14 (48.3%) patients, a two-stage – in 3 (10.35%). Subtotal thrombosing of AVM node was achieved in 7 (24.1%) patients. Later these nodes were surgically removed. 5 (17.2%) patients underwent radiosurgical treatment after subtotal AVM occlusion. A perioperative hemorrhage was registered in 1 patient that comprises 2.6% of the total number of endovascular procedures performed. The clinical outcomes in the majority of patients corresponded to mRS 0–1 (96.6%, n=28). A rough neurological deficit (total aphasia) in the postoperative period was noted in 1 patient (3.45%). In the series were no cases of mortality.

Conclusion Using PHIL as the only LEA during endovascular treatment of cerebral AVMs enables one to obtain good angiographic and clinical results. Application of this agent provides high primary radicality and reduces the number of endovascular stages to achieve expected AVM occlusion, which significantly decreases complication risks and radiation exposure for a patient.

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