The infrecuent cerebral anterior artery strokes, special characteristics to take into account.

Analysis of a sample.

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BACKGROUND AND PURPOSE

Cerebral anterior artery strokes (CAA) are very infrecuent and there are few cohorts published. They have special clinical, etiological and prognostic characteristics which are important to be known.

METHODS

We put forward a descriptive analysis of patients who suffered a stroke in the CAA territory admitted to the Virgen de la Arrixaca Hospital from 2009 until November. We evaluate demographic and clinical characteristics, treatment with thrombolytic therapy and outcomes. We consider good functional outcome Rankin scale (mRs) ≤ 2 . We analyse the relation between neurological deficit at presentation (NIHSS) and treatment received with dependency at 3 months (mRs). We use SPSS 22,0 statistic

RESULTS

- In the period of our study only 17 strokes involved CAA territory isolated (0.62%) from a total population of 2764 strokes. This percentage is similar to the samples published (0.4-3%).
- 13 of the patients were male (76,47%), while only 4 were women. Medium age was 70.
- We found two bilateral strokes: A1 oclusion in a patient with hypoplastic contralateral CAA. Left internal carotid subocclusion and stenosis >60% in right internal carotid with bilateral artery-to-artery emboli.
- Thrombolytic treatment with alteplase was given in 27.8%. The main cause of exclusion was to reach the hospital out of time (>4.5 hours).
- Cardioembolic etiology was the most frecuent (27.8%) followed by atherothrombotic and cryptogenic.
- 70,6% had NIHSS ≤ 8 at stroke onset. 94,1% had initial Rankin scale ≤ 2 (good prognosis), while reevaluation three months after stroke reduced the percentage to 35,3%.
- We did not found statistical relation between low NIHSS score and mRs ≤ 2 ($p \geq 0.05$). 75% of patients with unfavorable mRs scale (≥ 3) three months after stroke had not received thrombolytic treatment. We did not find prognosis differences between the group that received thrombolytic therapy and the one that did not received it, although it may be influence by the small sample.

	YES	NO
Arterial hypertension	14 (82%)	3 (8%)
Dyslipemia	7 (41%)	10 (59%)
Diabetes	8 (47%)	9 (53%)
Chronic atrial fibrillation	2 (12%)	15 (88%)
Recent atrial fibrillation	2 (12%)	15 (88%)
Smoking	4 (24%)	13 (76%)
AAS	8 (47%)	9 (53%)
Anticoagulant	3 (18%)	14 (82%)

	mRs ≥ 3	mRs ≤ 2	
Thrombolytic treatment	3(25%)	2 (40%)	OR 0.5 (0.55-4.6) p ≤ 0.536
No thrombolytic treatment	9(75%)	3(60%)	
NIHSS ≤ 8	7(58.3%)	5(100%)	OR 0.583(0.362-0.941) p ≤ 0.86
NIHSS ≥ 8	5(41.7%)	0	

CONCLUSIONS

- CAA strokes are quite unusual.
- Low NIHSS scores have no relation with better outcome. It may be due to the lower limb paresis predominantly, which restrain the gait. Neurocognitive impairment may also influence.
- Neurocognitive evaluation should be done in these patients because related sequels may influence the prognosis. Frontal test assesment might be useful.

SOURCES

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