CEREBROVASCULAR DISEASE IN ANTIPHOSPHOLIPID SYNDROME: 20 year experience in a University Hospital

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INTRODUCTION: Antiphospholipid syndrome (APS) is an autoimmune disorder for which optimal clinical management remains controversial. Specific immunologic profiles such as lupic anticoagulant (LA) positivity or triple antiphospholipid antibodies (aPL) positivity may have prognostic relevance.

METHODS: Retrospective analysis of clinical, immunological and therapeutic variables of patients with APS related cerebrovascular disease from 1997 to 2017.

RESULTS

Seventeen patients (82% female, mean age of 48±17 years) were included. Eight patients (47%) were receiving antithrombotic therapy because of previous thrombosis. Three patients had secondary APS.

Baseline characteristics	
Mean age, years (SD)	48 (17)
Female, n (%)	14 (82)
Primary APS, n (%)	14 (82)
Secondary APS, n (%)	3 (18)
-Systemic lupus erythematosus	2
-Eosinophilic granulomatosis with polyangiitis	1
Previous thrombotic events:	
-Ischemic stroke, n	5
-TIA, n	1
-Other arterial thrombosis, n	2
-Venous thrombosis, n	3
-Obstetric APS, n	3
Previous antithrombotic treatment:	
-Antiplatelets, n	3
-Vitamin K antagonists, n	2
-Direct oral anticoagulants, n	1
-Antiplatelets+ vitamin K antagonists, n	1
-Subcutaneous heparin, n	1

Image 1. MRI venography showing left transverse sinus thrombosis presented by one patient.

Clinical and therapeutic variables	
Cerebrovascular disease:	
-Ischemic stroke, n	12
-TIA, n	4
-CVT, n	1
Treatment on discharge:	
-Antiplatelets, n	4
-Vitamin K antagonists, n	9
-Antiplatelets+ vitamin K antagonists, n	2
-Antiplatelets+ direct oral anticoagulants, n	1

Twelve patients presented with ischemic stroke, 4 patients with transient ischemic attack (TIA) and 1 patient with cerebral venous thrombosis (CVT). Clinical management was heterogeneous.

Neither triple aPL nor LA positivity were significantly associated with stroke/TIA recurrence or death.

Prognostic variables	
Mean follow-up, years (SD)	4.9 (4.5)
mRS end of follow-up:	
-0-2, n	9
-3-5, n	3
-6, n	5
Causes of death:	
-Intracerebral haemorrhage, n	2
-Multiple ischemic stroke,n	1
-Catastrophic APS, n	1
-Unkown, n	1
Long-term recurrences:	
-TIA, n	2
-Stroke, n	1
-Other arterial thrombosis, n	1

APS related cerebrovascular disease had significant morbidity and mortality.

DISCUSSION: Evidence regarding optimal antithrombotic management in patients with cerebrovascular disease due to APS is lacking. Either antiplatelet therapy and vitamin K antagonists (at an INR target 2-3 or >3) or its combination have been proposed. Direct oral anticoagulants have been used in some patients. LA and triple APL positivity have been related with a greater risk of arterial and venous thrombosis and, consequently, with a poorer prognosis.

CONCLUSIONS: In our experience, APS related cerebrovascular disease had significant morbidity and mortality. Clinical management was heterogeneous. No predictors of poor prognosis were detected, although small sample size may be responsible.

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