

VASCULITIS OF THE CENTRAL NERVOUS SYSTEM: AN INFREQUENT CAUSE OF STROKE. REPORT OF 16 CASES IN A UNIVERSITY HOSPITAL OF COLOMBIA BETWEEN 2014 - 2018.

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Background:

There is not enough information about the frequency of cases of primary (PACNS) or secondary (SACNS) vasculitis of the central nervous system in Colombia, this research article seeks to know the frequency of its presentation in a reference hospital in the city of Bogotá (Colombia).

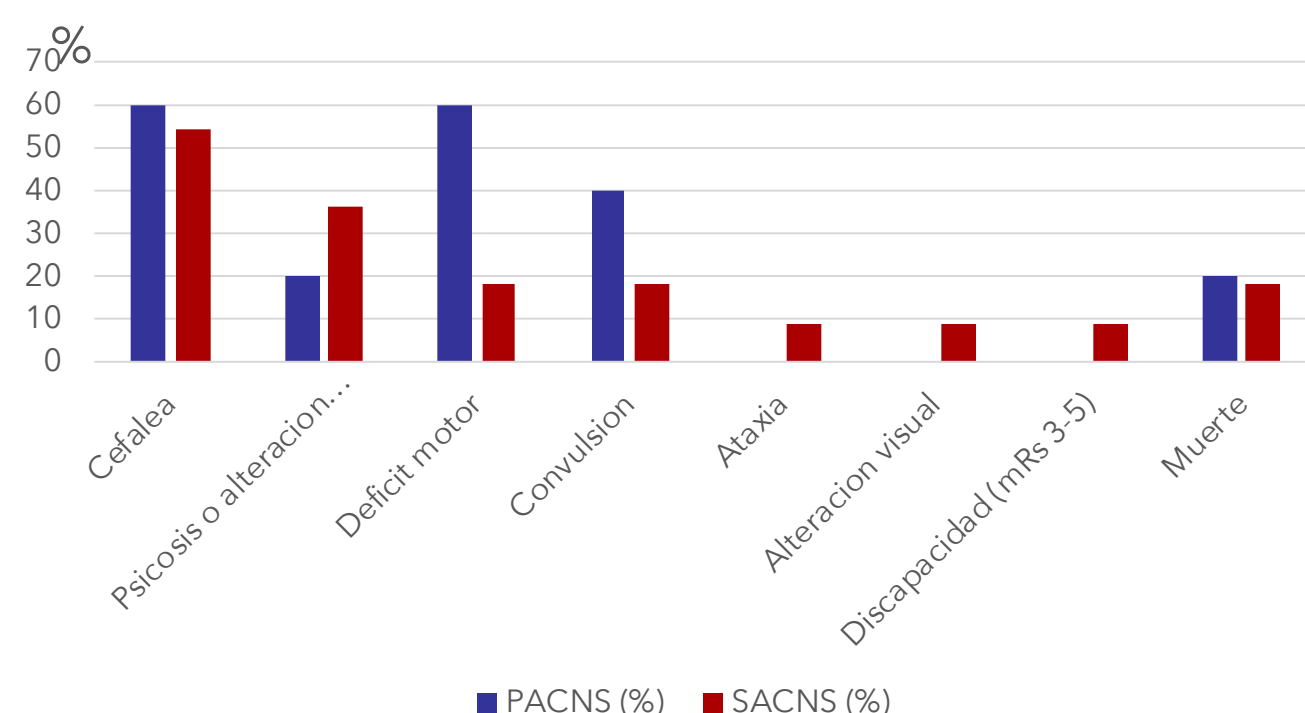
Methods:

Observational study of case series, from 2014 to 2018. The search through electronic medical records of the diagnosis of PACNS, according to the criteria of Calabrese and Mallek that were seen in emergency room. The search for SACNS was performed with autoimmune disease and evidence of cerebrospinal fluid (CSF), magnetic resonance imaging (MRI), angiography or pathology abnormalities.

Results:

We found 16 cases, 5 (31.2%) PACNS and 11 (68.8%) SACNS; female 87.5%; with 42±15 years old. The most common symptoms were: headache (56.2%), cognitive (31.2%) and motor deficit (31.2%). The most frequent etiology was systemic lupus erythematosus (73.5%) of SACNS. The most frequent finding was: multiple subcortical ischemic lesions in different arterial territories (56.2%) and haemorrhagic stroke (31.2%), with a predominance of convexity subarachnoid hemorrhage (25%) in the IRM. In the angiographic changes were bilateral (55.5%) and multisegmental (44.4%). The presence of hyperproteinorraquia (66.7%) in the CSF. All patients received induction treatment with steroids, other combined immunosuppressive therapies: cyclophosphamide (37.5%), Azathioprine (31.2%), Rituximab (18.8%), etc. Mortality was 18.8%

Fig 1. Clinical features



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Conclusions:

In our study, CNS vasculitis predominated in females and we observed higher mortality, which is different from that reported in other series. The clinical presentation and the findings in CSF and MRI were similar in appearance to other publications.

Table 1. Imaging findings CNS vasculitis

	All n=16 (%)	PACNS n=5 (%)	SACNS n=11 (%)
MRI Abnormalities			
Ischemic Stroke (n=9)	9 (56,2)	2 (40)	7 (63,6)
• Múltiples stroke	9 (56,2)	2 (40)	7 (63,6)
• Subcortical	8 (50)	2 (40)	6 (54,5)
• Basal ganglia	4 (25)	2 (40)	2 (18,2)
• Cortical	3 (18,8)	2 (40)	1 (9,1)
Hemorrhagic stroke° (n=5)	5 (31,2)	3 (60)	2 (18,2)
• Subarachnoid convexity	4 (25)	2 (40)	2 (18,2)
• Lobar	2 (12,5)	1 (20)	1 (9,1)
• Basal ganglia	1 (6,2)	1 (20)	-
• Cerebellar	1 (6,2)	-	1 (9,1)
• Spinal cord	1 (6,2)	1 (20)	-
Other abnormalities			
• Extensive Myelitis	2 (12,5)	1 (20)	1 (9,1)
• Cerebral venous thrombosis	2 (12,5)	-	2 (18)
• Hypertrophic pachymeningitis	2 (12,5)	-	2 (18,2)
• Meningeal enhancement.	2 (12,5)	1 (20)	1 (9,1)
Angiogram abnormality (DSA, MRA, CT)	n=9 (%)	n=5 (%)	n=4 (%)
• Bilateral	5 (55,5)	2 (40)	3 (75)
• Pattern "vessel beadings"	4 (44,4)	3 (60)	1 (25)
• Stenosis	2 (22,2)	--	2 (50)
• Normal	3 (33,3)	2 (40)	1 (25)

Reference:

- Ann Neurol. 2007 Nov;62(5):442–51.
- Lancet. 2012;380(9843):767–77.
- Semin Neurol. 2014 Sep;34(4):405–12.
- Stroke. 2017 May;48(5):1248–55.