

INTRODUCTION

Stroke is one of the leading causes of disability and death. Different conditions, called Stroke mimics (SM), may present with a clinical syndrome resembling an acute stroke (AIS). SM accounts from 5% to 20% of all acute stroke presentations. Seizures are considered a frequent cause of mimics. Among epileptic manifestations, seizures presenting with isolated aphasia are quite rare, while this symptom is more often due to ischemic stroke. Isolated aphasia could represent a diagnostic challenge in an emergency setting. SM patients are usually more likely to be younger, with better functional outcomes, compared with AIS patients. We performed an outcome evaluation in patients presenting with aphasia due to ischemic stroke or epileptic seizures.

MATERIALS AND METHODS

A retrospective study of patients admitted to our Neurologic Unit for a suspected stroke, from January 2015 until January 2016 was performed. We selected patients discharged with a final diagnosis of aphasia associated or not to other neurological deficits due to an ischemic stroke and mimic with seizures presenting with speech impairment. Anamnestic, clinical and instrumental evaluations were performed in the acute phase to reach the final diagnosis. We considered the following outcome parameters: Modified Rankin Scale (mRS), Barthel scale, National Institutes of Health Stroke Scale (NIHSS). Length of stay and mortality were estimated. Statistics comparing stroke versus epileptic mimic included Mann-Whitney test or Fisher's exact test, as appropriate.

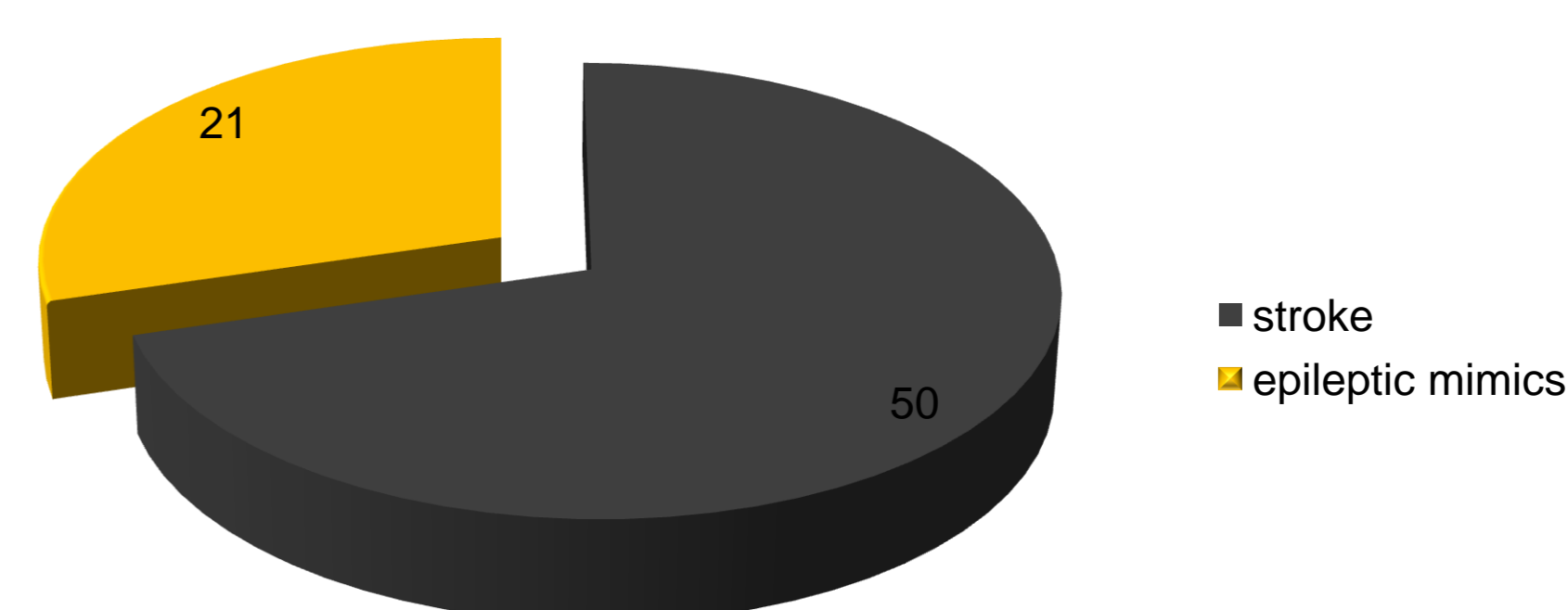
RESULTS

Among patients admitted for probable AIS, 71 patients presented with sudden aphasia. A cerebrovascular disease was diagnosed in 50 patients (70%) while epileptic mimic in 21 (30%). Only 2 patients with final diagnosis of epileptic seizures received intravenous thrombolysis (IVT), with favorable outcome. Baseline demographic and clinical characteristics did not differ between groups. There were no statistically significant differences regarding hospitalization days, mortality, mRS and Barthel scale at the discharge. The majority of patients were functionally independent, with a median discharge mRS=1. There was a trend toward lower NIHSS scores at discharge in mimics compared with strokes.

	Epileptic mimic	Ischaemic stroke	p value*
Hospitalization duration (days)	10 (1-40)	11 (1-35)	0,339
During hospitalization:			
thrombolysis/thrombectomy	2 (12,5%)	12 (87,5%)	0,075
treatment with antiepileptic drugs	20 (90,9%)	2 (9,1%)	<0,001
treatment with benzodiazepines	9 (40,9%)	0 (0,0%)	<0,001
Outcome:			
NIHSS at discharge	0 (0-12)	1 (0-7)	0,056
Ranking at discharge	1 (0-6)	1 (0-5)	0,821
Barthel 3 days after hospitalization	72,50 (10-100)	80 (1-100)	0,841
Barthel at discharge	100 (10-100)	100 (10-100)	0,739
Discharged at home	13 (59,1%)	9 (40,9%)	0,816
Deceased during hospitalization	1 (4,5%)	0 (0,0%)	0,129

Outcome assessment in stroke patients versus epileptic mimics

Final diagnoses at discharge



CONCLUSIONS

Our findings showed no significant differences in terms of functional outcome and days of hospitalization in patients with aphasia due to AIS compared with patients with epileptic aphasia. Only few patients receiving IVT did have a final diagnosis of seizures. According to literature, these mimics had good outcome and no treatment-related complications occurred. Further prospective investigations are needed to evaluate outcome assessment in mimics versus stroke.

Bibliography

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