

Evaluation of anticoagulants misuse in patients admitted for ischaemic stroke in a neurology unit

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Introduction

We presume that some ischaemic strokes (IS) can be caused by a misuse (prescription errors or lack of compliance) of oral anticoagulant medications (Vitamin K Antagonists (VKA) or Direct Oral Anticoagulant (DOA)).

Objective

The purpose of this study is to define the proportion of iatrogenic IS for patients admitted in a neurology unit.

Material and Methods

A prospective, single-centre, descriptive study was conducted during 5 months. 75 patients were included

Collected datas :

- Age, Weight, Sex, Cause of the IS, creatinine levels
- CHADSVASC and HAS BLED scores
- INR
- Anticoagulant treatments before hospitalization.
- The 4-item morisky medication adherence scale (MMAS-4) was used to assess compliance.

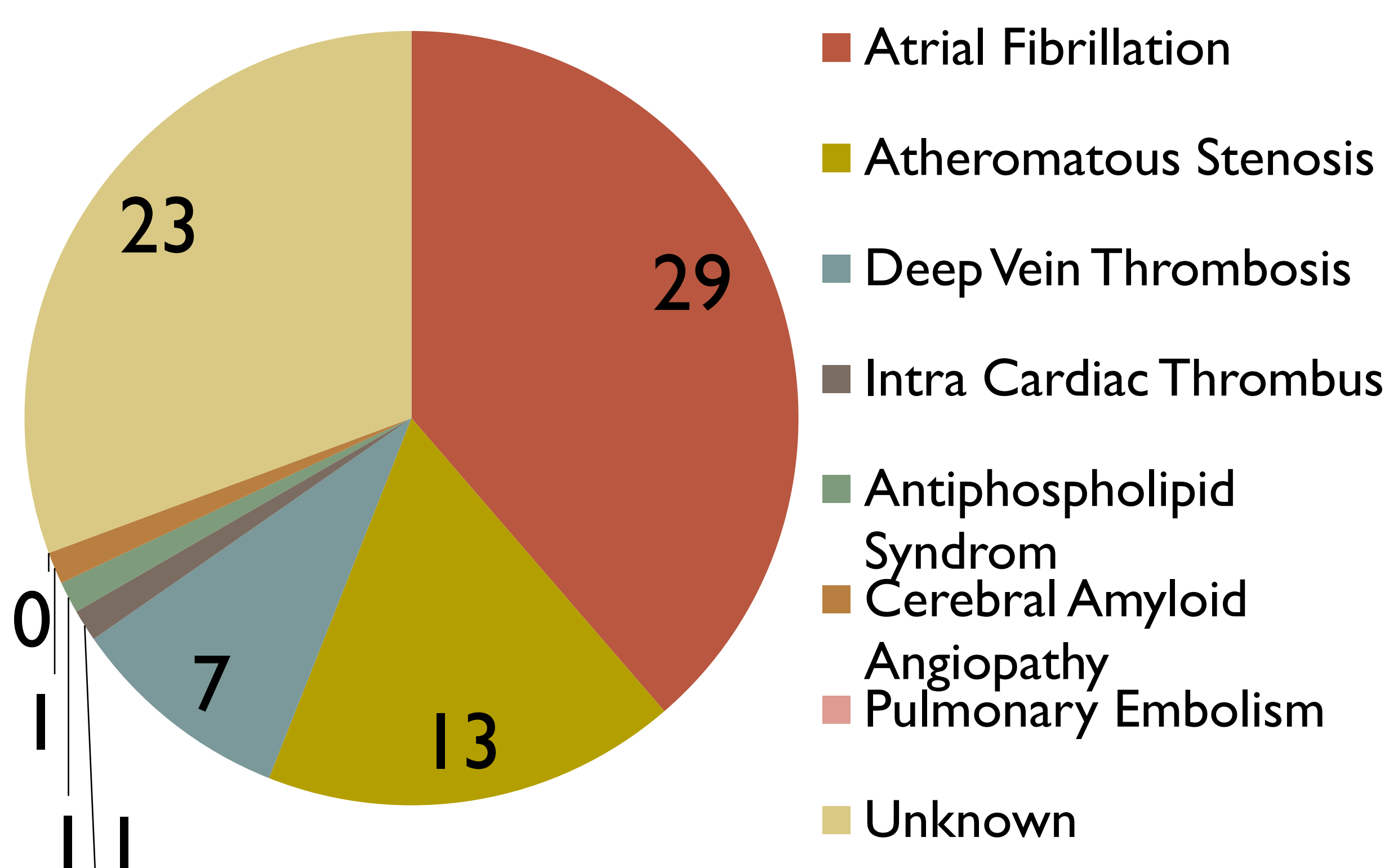
Results

DATA	RESULT
Mean age :	72 years old
Sex :	56% Male
CHADS VASC :	3,4/9
HAS BLED :	2,9/9

Mean compliance score was 2,5/4 for 46 (61%) of patients (29 patients were not evaluated).

12 patients (16%) were pretreated with anticoagulants before their hospitalization

Causes of Ischaemic Stroke among the 75 patients



Compliance score detailed for the 12 patients under VKA and DOA

	Patient number	INR in the therapeutic range. Yes/No	MMAS-4
Fluindion	Patient 17	No	Missing data
	Patient 25	No	Missing data
	Patient 43	No	Missing data
	Patient 44	Yes	Missing data
	Patient 45	No	2
Warfarin	Patient 75	Yes	Missing data
	Patient number	Well prescribed* DOA ? Yes/No	MMAS-4
Apixaban	Patient 37	Yes	Missing data
	Patient 64	Yes	2
Rivaroxaban	Patient 46	Yes	Missing data
	Patient 51	Yes	1
	Patient 52	Yes	2
	Patient 66	Yes	0

* Meaning in accordance with patients' weight, age and creatinine levels (cf summary of product characteristics).

Discussion

Compliance scores were low for the patients under DOA and a majority of INR before hospitalization was not within the therapeutic range for patients under VKA. The risk of developing an IS was thus increased for these patients before hospitalization.

Conclusion

Implementing Educational Programs, involving community pharmacists and stressing the importance of INR monitoring seem to be potential axis of improvement to promote patients' compliance before hospitalization.

References and/or Acknowledgments : <https://www.ncbi.nlm.nih.gov/pubmed/17186395>

