

Managing thrombotic events while on Anti coagulation(DOACS)

Authors, L, THOMAS¹ and A THEODOULOU²

Haematology, BHR NHS trust . London,
Haematology, BARTS Health NHS Trust, LONDON

INTRODUCTION

The study was based on the retrospective audit on the cohort of patients who were started on Direct Oral Anticoagulants (DOACS) for the various indications, either for stroke prevention due to Atrial Fibrillation (AF) or for treatment for Venous Thromboembolism (VTE) and those of them who have failed anticoagulation treatment in the last 5 years.

Data were gathered from **7200** patients that were started on DOACS and **only 34** patients were reported to have failed anticoagulation treatment (accounting for only 0.5%) over 5 year period

We looked into the duration when the treatment failed, after starting on DOACS

AIM

- 1) Single centre audit where the DATA audited over Five years to establish and assess the cause for the break through events while on DOACS
- 2) Evaluate the triggering factors and Management of those events including the follow ups over the Fifteen months

METHOD

- Data were collected through the DAWN – the online Recording System
- Patients mainly on DOACS were chosen for our study
- Primary indication for starting DOACS were noted
- Patients were rescanned on relapse to assess between the progression or a new clot.
- Drugs level was noted to the cases , when available.

REFERENCES

RESULTS

We looked into the duration when the treatment failed, after starting on DOACS and the findings were:

Triggering factors

Out of 33 patients, 5 had very subtle triggering factors such as the long haul flights. One had bladder cancer hence changed to LMWH, and one had retroviral disease at the time of presenting with further VTE. Three were not compliant with medications.

Failure Pattern :

We've tried to establish a failure pattern if any and noted the below :

- Patient on anticoagulation for AF to present with VTE were 5
- Patients with AF who presented with stroke were 3 and
- Patients with VTE presenting with further VTE were 21, and
- Only 1 developed PE having been on anticoagulation previously for portal vein thrombosis.

Managing on Progression:

Data also presents how these patients were managed.

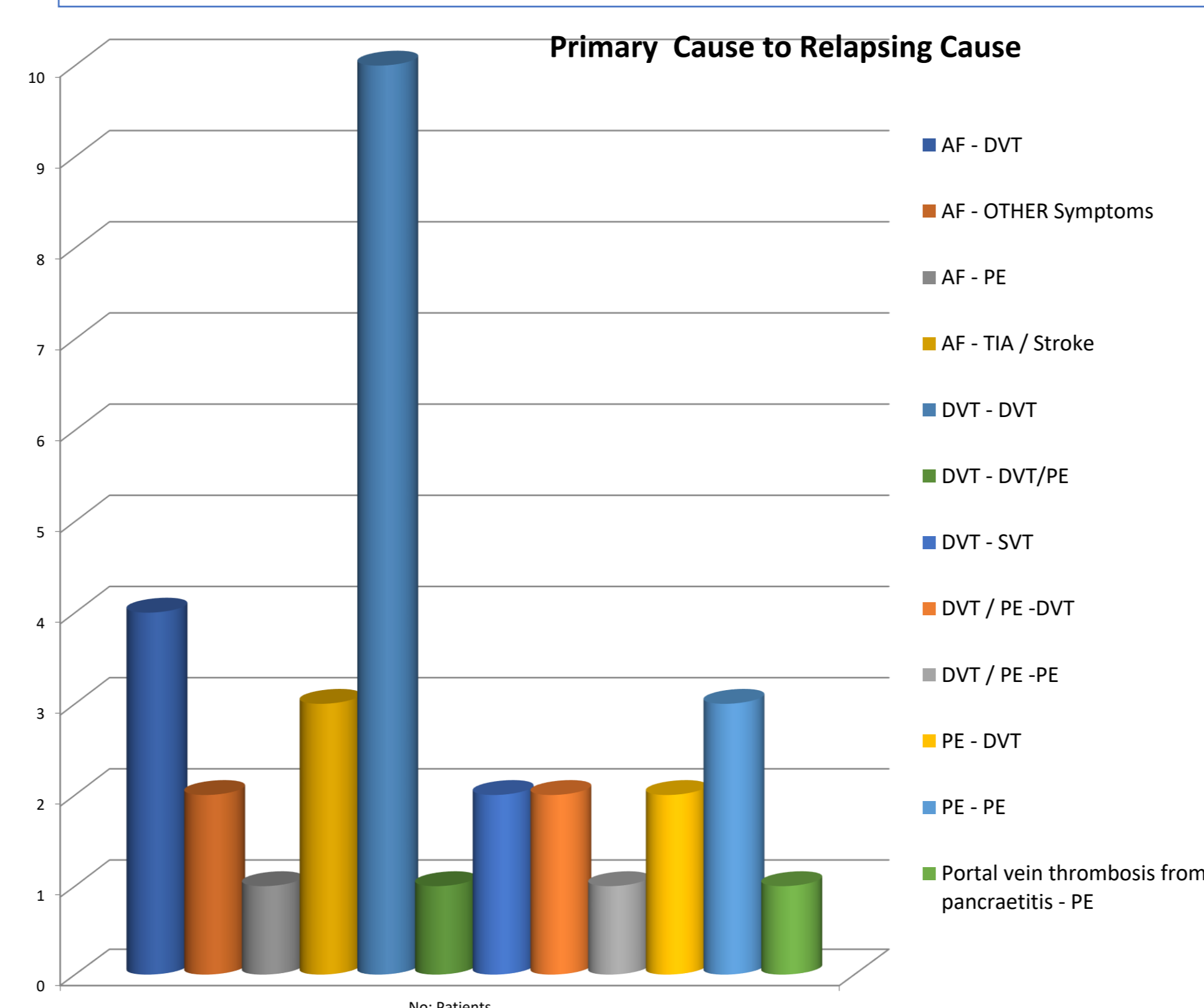
The data shows that 20 patients (56%) were changed to Warfarin ,but 2 patients were reverted back to same DOACS 6 months later due to patient preference , 2 patient continued on LMWH , and 11 were changed to different anti -XA Agent .

Thrombophilia Screening:

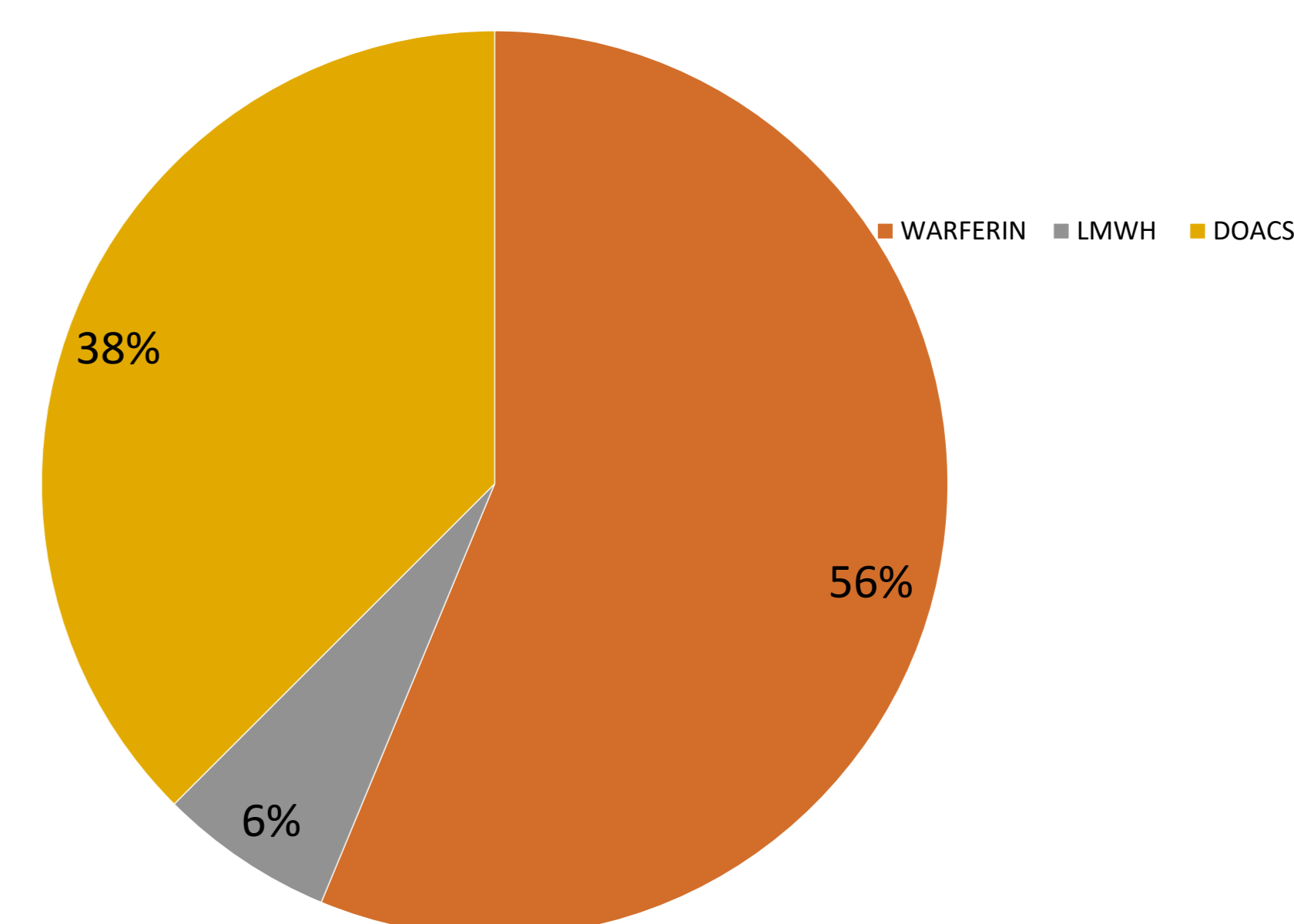
Seven out of thirty-three patients had full thrombophilia screen. Two were detected to be factor V Leiden heterozygous, and one had protein C deficiency. The remaining patients had lupus anticoagulant screening checked only and were negative. Every patient dose was weight appropriate except one patient who weighed 152kg at presentation and the dose was adjusted according to the creatinine clearance (according to Cockcroft Gault calculation).

Measuring Assay:

Six out of Thirty three had DOACS assay at Breaking Event. Five had normal levels and one patient had levels <11 ng/l.



Post Relapse Management



CONCLUSIONS

There is no universal agreement or It is an open question as to how to manage the patients who fail their anticoagulation treatment while on DOACS.

Do you change to different DOACS or change to warfarin?

Certainly, in the case of patients with Antiphospholipid syndrome, the suggestion would be to change to warfarin, and potentially with a higher INR target, as evidence from recent research is showing that DOACs are not offering adequate anticoagulation. There is no research in other groups of patients. We are aware from the trials conducted, that none of the anticoagulation treatments is offering a complete prevention from stroke in the cases of AF patients, or a complete prevention from VTE in patients who have presented with previous thrombosis.

No evidence is yet available to support a management plan, but from our Thirty Three patients fourteen of them (42%) who continued on DOACS remain well now after being on DOACS for an average of 15 months.

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Anti coagulation Team – Whipps Cross Hospital , London

CONTACT INFORMATION

Dr. Lovina Thomas MRCP ,FRCPath
Lovina.thomas@btuh.nhs.uk