

Do patients taking Direct Oral Anticoagulants (DOAC) require regular systematic review? Evidence from a Comprehensive Anticoagulation and Thrombosis Centre

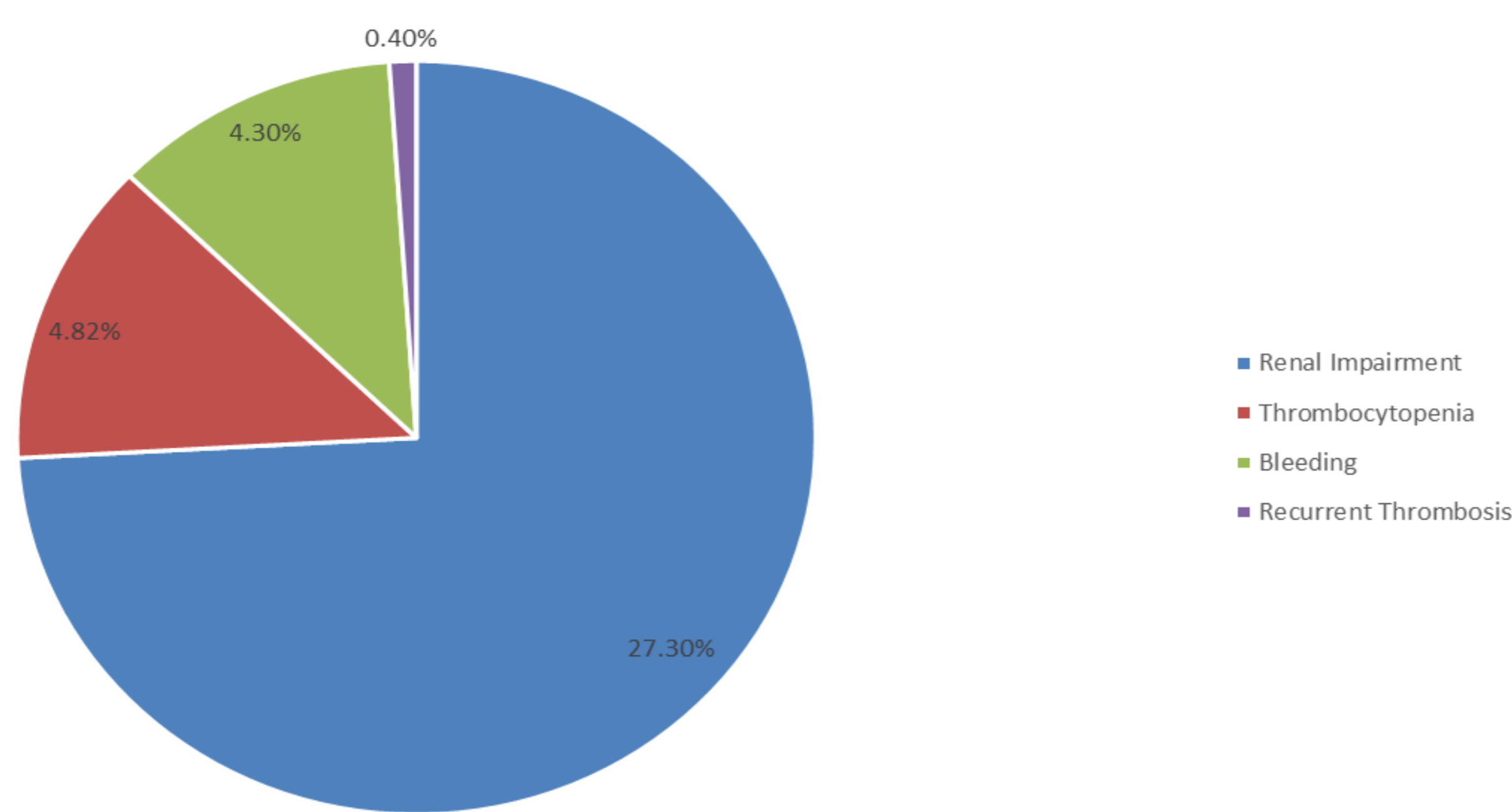
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OBJECTIVES

- DOACs are preferred anticoagulants for non-valvular AF and VTE treatment Bleeding and thrombotic risk assessment changes with age, co-morbidities, concurrent medication and liver-renal impairment.
- The Objective of the study was to determine:
 - Compliance with ESC(European Society of Cardiology) guidelines 2018 on follow up of patients on anticoagulation.
 - Clinical risks identified during regular systemic review.
 - Change of treatment following the review.



METHODS

- Between 1st Jan 2018-31st Dec 2018, 7814 comprehensive reviews were performed of 5739 patients on oral anticoagulants. Of these 2220 reviews were performed of 1280 patients on DOACs. The following Quality standards were audited.
- Confirmation of appropriate indication
- New bleeding (Minor, Clinically significant non major bleeding CSNMB, Major bleeding)
- New thrombotic events
- Concurrent medications/interactions
- Clinical Risks identified by systemic review and Full Blood Count, Renal functions and Liver functions as per guidelines.
- Influence on patient management.

RESULTS

- Patients compliance was found to be good with DOACs, only 1% were dissatisfied.
- 36 patients had switch of DOAC class where as in 64 patients dose was altered.
- 27% of our patient cohort had moderate or severe renal impairment and in over 20% patients significant medication interactions were identified.
- The review process resulted in change in treatment in 5.2% patients.

Clinical Parameter	Number of reviews of patients on DOAC n=2220 (100%)
Bleeding events (all)	97 (4.3%)
Major bleeding	3 (0.1%)
Clinically significant non-major bleeding	6 (0.3%)
Minor bleeding	88 (3.9%)
Recurrent Thrombosis (all)	9 (0.4%)
Recurrent venous thrombosis	5
Stroke and systemic embolism	4
Thrombocytopenia	107
Severe (plat count < 50X10 ⁹ /L)	0
Moderate (plat count 50-80X10 ⁹ /L)	3
Renal Impairment	607 (27.3%)
Severe (Cr Cl <30ml/min)	76 (3.4%)
Moderate (Cr Cl 30-50ml/min)	531 (23.9%)
Significant medication interaction	480 (21%)
Patient non-compliance/ dissatisfied with Rx	20
Outcome altered	117 (5.2%)
Anticoagulation stopped	9
Anticoagulant switched	36 (1.6%)
Dose altered	64 (2.9%)
Incorrect indication identified	0
Antiplatelet stopped	8
Others (pt declined review, advise given to GP, etc)	13

CONCLUSIONS

- The study confirms that DOAC are safe and effective in most patients with low risk of bleeding and recurrent thrombotic events.
- Though DOAC do not require regular coagulation testing, regular comprehensive review by specialized clinicians is helpful in identifying risks and taking appropriate clinical intervention.

References

European Heart Rhythm Association Practical Guide on the use of non Vitamin K antagonist oral anticoagulants in patients with Atrial Fibrillation European Heart Journal (2018) 39,1330-1393.