

## Research Round up September 2023- Anticoagulants in Atrial Fibrillation

### Introduction

Last month the research round-up provided you with an overview of articles looking at issues in the areas of rheumatology. This month we are looking at prescribing in atrial fibrillation.

The first article looks at managing the condition in primary and secondary care setting. The second looks at patterns of anticoagulant prescribing in general practice while the third examines barriers and enablers in stroke prevention.

<https://academic.oup.com/europace/article/25/2/308/6678591>

### Contemporary management of atrial fibrillation in primary and secondary care in the UK: the prospective long-term AF-GEN-UK Registry

A Shantsila, G Y H Lip, D A Lane (2023) *Contemporary management of atrial fibrillation in primary and secondary care in the UK: the prospective long-term AF-GEN-UK Registry*. EP Europace: 25:2, 308-317.

This study published in the Journal EP Europace sought to establish a prospective registry looking at the contemporary management of patients with atrial fibrillation by cardiologists, GPs and other relevant physicians in the UK and look at data at baseline and at one year follow up. The researchers collected data on patients who had been diagnosed in the preceding 12 months. This data was retrieved from medical records from 101 UK sites and was necessary to compare characteristics of the patients and their treatments between the medical specialties involved in prescribing for atrial fibrillation. One of the outcome measures was whether or not guidelines for oral anticoagulation were being adhered to and this was analysed using regression analysis. In total records for 1595 patients who met the criteria for study were included. Demographic data was reported on including age, gender and ethnicity. Participants recruited had data collected at baseline and were advised this would be redone at a one year follow up point. The participants were recruited between June 2017 and June 2018. At the baseline point oral anticoagulation prescription rates were 84.2%. This increased to 87.1% at the one year follow up point. The type of anticoagulant prescription that was predominant was the non-vitamin K antagonist. It was noted that there was a difference between primary and secondary care with vitamin K antagonist prescription being higher in the prescribing GPs. Additionally, it was noted that stroke specialist physicians were the highest prescribers of the non vitamin K antagonists. It was evident that adherence to prescribing guidelines at baseline significantly reduced the risk of death by stroke within one year of diagnosis. The authors conclude that differences in prescribing by specialties is evident, but that overall guideline adherence was very good and associated with reduced mortality. Also noted was that rhythm management was only seen in 25% of the participants but that 56% reported symptoms of atrial fibrillation. They suggest that this registry extends the knowledge of management of atrial fibrillation across specialties and demonstrates good adherence to guideline prescribing and stroke prevention.

[https://bigpopen.org/content/7/1/BJGPO.2022.0179?utm\\_source=TrendMD&utm\\_medium=cpc&utm\\_campaign=BJGP\\_Open\\_TrendMD\\_1](https://bigpopen.org/content/7/1/BJGPO.2022.0179?utm_source=TrendMD&utm_medium=cpc&utm_campaign=BJGP_Open_TrendMD_1)

Pattern of oral anticoagulant prescribing for atrial fibrillation in general practice: an observational study in The Netherlands

CCM Kager, M Horsseelenberg, JC Korevaar, C Wagner & K Hek (2023) *Pattern of oral anticoagulant prescribing for atrial fibrillation in general practice: an observational study in The Netherlands*\_BJGPOpen; 7 (1)

This article published in the BJGPOpen sought to outline the pattern of oral anticoagulation prescription for patients diagnosed with atrial fibrillation in the general practice environment. This observational study was conducted in the Netherlands between 2017 and 2019 and included data from 214 general practices. The authors state that the Dutch prescribing guidelines for GPs varies from those for cardiologists as in that in cardiology direct oral anticoagulants in preferred wherein general practice these are seen as equivalent to vitamin K antagonists. Outcome measures for the study were to describe the pattern of oral anticoagulation prescribing and to assess whether there was a proactive conversion between types or anticoagulant by general practitioners. Patient inclusion criteria included being older than 60 years, diagnosed with atrial fibrillation and prescribed an oral anticoagulant by a general practitioner between the inclusion dates. Observations made included prevalence of anticoagulant use and any switching of type of anticoagulant. This resulted in the inclusion of 12516 participants of which 476 (4%) were started on oral anticoagulants in 2018 and the remaining 12040 patients were prevalent users. It was noted that in general practitioner initiated oral anticoagulation the preferred class of drugs were the direct oral anticoagulants (DOACs) with these accounting for 88% of cases. In the group of prevalent users 60% of these were prescribed vitamin K antagonists. GP switching of anticoagulants revealed that in the study period GPs switched drugs for 1% of those they had initiated and 0.6% of prevalent users. The authors conclude that in the Netherlands, general practitioners during the study period, predominantly started newly diagnosed patients with atrial fibrillation on DOACs whereas patients previously diagnosed and already on medication tended to be on vitamin K antagonists. They note that switching of drugs is a rare occurrence and suggest that this means that in time the number of patients on vitamin K antagonists will decrease if these prescribing patterns continue. Finally, they suggest this will affect the necessity of bloods for international normalised ratio (INR) testing in this population of patients.

<https://bmjopen.bmj.com/content/13/4/e069575.abstract>

Barriers and enablers to healthcare system uptake of direct oral anticoagulants for stroke prevention in atrial fibrillation: a qualitative interview study with healthcare professionals and policy makers in England

K Medlinskiene, S Richardson, D Petty, K Stirling, B Fylan (2023) *Barriers and enablers to healthcare system uptake of direct oral anticoagulants for stroke prevention in atrial fibrillation: a qualitative interview study with healthcare professionals and policy makers in England*. BMJOPEN: 13:4, 1-11.

This article published in the Journal BMJOpen sought to better understand the factors, either as barriers or enablers that influence the uptake of direct oral anticoagulants (DOACs) across different health economies in National Health Service England from the perspective of health professionals and other health economy stakeholders. This qualitative study was conducted between March and October 2019 using semi structured interviews and across three health economies in the North of England. In total, 46 participants were recruited for interview (14 in health economy A, 16 in health economy B, 13 in health economy C and 3 working across health economies). These participants were all healthcare professionals involved in the management of patients on oral anticoagulant medication or were stakeholders who were involved in implementing anticoagulation prescribing. Further participants were pharmaceutical industry representatives or from patient support groups. Interviews were conducted either face-to-face or by telephone and the interviews transcribed and analysed using a robust framework method.

The researchers found four main themes impacting on the uptake of DOACs. These were the perceived value of innovation, the clinical practice environment, local health economy readiness for change and the external health service context. These themes are explored in detail with some quotes from participants to give context around efficacy, reliability, cost and also the impact of no reversal agents. All these factors influenced prescribing habits. The authors suggest that the interviews also highlighted strategies used by prescribers and tensions between providing patient centred care and financial implications. They conclude that their findings provide a new and more in-depth understanding of DOAC prescribing and may be transferrable to other chronic conditions and their medication management.

Conclusion

Anticoagulation prescribing in atrial fibrillation is an important aspect of management for stroke prevention. Different classes of drugs are available with differences in use and monitoring. Cost is an issue whereas efficacy is broadly similar. Many factors including guideline adherence influence drug prescribing practices. This research is important in that DOACs are still relatively new medications and their long term use and monitoring of such is necessary.