Methods We analysed all 7 day Holter ECG tests in Sandwell and West Birmingham NHS Trust from 1st April 2014 to 30th April 2016, using Spacelabs Sentinel server running Pathfinder V 1.7.1. Tests were bookable by primary care and hospital physicians. Holter recordings from 364 patients, previously reported by cardiac physiologists were reviewed by physicians trained in Holter analysis. 46 patients had previously diagnosed AF and were excluded from the analysis. Here we present the results from a final cohort of 318 patients.

Results Mean age of the patients was 59.2 years (median 56 years, IQR 43–72) and 55% were male. Average time of monitoring was 162.2 hours. Palpitations (56%), dizziness (16%), ischaemic stroke or TIA (15%), syncope (10%), and chest pain (3%) were reasons for referral. New AF was diagnosed in 25/318 patients. The pick-up rate of incidental AF was 7.86%. 9/48 (18.7%) of patients with CVA and 16/178 (8.9%) with palpitations had new AF. For 7 day Holters performed with intention to look for AF (stroke and palpitations) the combined diagnostic yield to pick up new AF was 11%. There was no AF detected for indications of dizziness, syncope or chest pain.

Patients with newly diagnosed AF were older with mean age 71 years (CI 66–78, SD 17.3) vs. 57 years (CI 55–59, SD 17.6) for non-AF group ($p=0.001$), more often suffered from coronary artery disease (43% vs 18%, $p=0.001$), prior stroke or TIA (64% vs 23%, $p=0.04$), moderate to severe valvular heart disease (20% vs 6%, $p=0.01$), had higher occurrence of >250 supra ventricular ectopics/day (73% vs 60%, $p=0.05$) and atrial runs of more than 3 beats (55% vs 25%, $p=0.002$ respectively). Heart rate parameters for patients with and without AF were not different in our cohort. Other medically relevant findings were 2nd degree AV block (9/318, 2.8%), 3rd degree AV block (2/318, 0.6%) and non-sustained VT (11/318, 3.4%).

Conclusions Prolonged ECG monitoring in a real life cohort, especially in patients with high risk of AF, leads to higher diagnostic yield, with significant therapeutic consequences. It appears reasonable to provide open access to prolonged ECG monitoring to at-risk populations in primary and secondary

care. Further analysis of risk factors for paroxysmal AF and systematic evaluations of treatment and outcomes after AF screening are warranted to define populations for screening for silent AF.

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RIVAROXABAN VS. DABIGATRAN OR WARFARIN IN REAL-WORLD OBSERVATIONAL STUDIES OF STROKE PREVENTION IN ATRIAL FIBRILLATION: SYSTEMATIC REVIEW AND META-ANALYSIS

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Objective To evaluate the effectiveness and safety of rivaroxaban in real-world practice compared with dabigatran (R vs. D) or with warfarin (R vs. W) for stroke prevention in atrial fibrillation (AF).

Methods and Results 17 studies were included after a thorough search in PubMed for studies reporting comparative effectiveness and safety of R vs. D(3), R vs. W (11) or both conditions (3) for stroke prevention in AF. Overall, the risks of ischaemic stroke (IS)/systematic thromboembolism (TE) with rivaroxaban were similar compared with dabigatran (Figure 1) IS/TE: (HR:1.02, 95% CI: 0.91–1.13, $I^2=70.2\%$, $n=5$), but were significantly reduced when compared to warfarin. IS/TE: (0.75, 0.64–0.85, $I^2=45.1\%$, $n=9$). Major bleeding risk was significantly higher with rivaroxaban than dabigatran (Figure 2) (1.38, 1.27–1.49, $I^2=26.1\%$, $n=5$), but similar to warfarin (0.99, 0.91–1.07, $I^2=0.0\%$, $n=6$). Rivaroxaban was associated with increased all-cause mortality and gastrointestinal bleeding (GIB), but similar risk of acute myocardial infarction (AMI) and intracranial bleeding (ICB) compared with dabigatran. When compared with warfarin, rivaroxaban was associated with similar risk of any bleeding, mortality and AMI, but a higher risk of GIB and lower risk of ICB.

Conclusions In this systematic review and meta-analysis, rivaroxaban was as effective as dabigatran, but was more effective

Abstract 45 Figure 1 Rivaroxaban compared with Dabigatran in risk of IS/TE in AF patients. IS, ischemic stroke, TE, thromboembolism. LD, low-dose; HD, high-dose; BD, both-dose. AF, atrial fibrillation

Abstract 45 Figure 2 Rivaroxaban compared with Dabigatran in risk of major bleeding in AF patients. AF, atrial fibrillation. ECH, extracranial hemorrhage.

than warfarin for the prevention of IS/TE in AF patients. Major bleeding risk was significantly higher with rivaroxaban than dabigatran, as was all-cause mortality and GIB. Rivaroxaban was comparable to warfarin for major bleeding, with an increased risk in GIB and decreased risk of ICB.

46 AUDIT OF NEW ORAL ANTICOAGULANT MONITORING IN PRIMARY CARE; ARE PATIENTS BEING PRESCRIBED THE CORRECT DOSE?

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Non-vitamin K antagonist oral anticoagulants (NOACs) are increasingly being used for the prophylaxis of stroke in patients with non-valvular atrial fibrillation (NVAF). One of their limitations is their reliance on renal clearance making them potentially more unsafe in patients with renal impairment. NICE recommend regular renal function testing in these patients as well as drug dose adjustments to be made according to their calculated CrCl.

Aims 1. To identify patients with NVAF who have been prescribed NOACs and to measure the percentage of those that have had renal function tests done in the last 12 months.

2. To determine if patients are being prescribed the correct anticoagulant dose as per their CrCl?

3. Are 100% of patients having their renal function and weight monitored at the correct frequency according to NICE recommendations?

Methods Data was collected from two GP practices in Bognor Regis. CrCl was calculated for each patient by using the Cockcroft-Gault equation. The dose of anticoagulant was then reviewed for each patient to see if it was appropriate as per their CrCl.

Results 176 patients were identified. 45% of patients were prescribed Apixiban, 41% were prescribed Rivaroxaban and 14% of patients prescribed Dabigatran.

The average age of patients was 77 years old with a median age group of 78 years.

84.5% of patients on NOACs had their renal function tested in the last 12 months with the remainder of patients having their renal function monitored at varying time periods

greater than 12 months and less than 3 years. It was found that one patient had no record of their renal function.

In order to calculate their CrCl, weight measurement is also required. However only 49% of patients had their weights checked in the last 12 months. 4% of patients had no recorded weights.

Accurate CrCls could only be measured in 46% (81/176) of patients, of whom had both renal function and weights recorded in the last 12 months.

Assuming stable weights, all patients prescribed apixiban and dabigatran were prescribed the correct dose as per their CrCl, however only 81% (59/73) of patients taking rivaroxaban were on the correct dose. 2 patients were under anticoagulated despite normal CrCl, and 12 patients despite having impaired renal function (CrCl<50) were prescribed the higher dose. Patients with impaired renal function (CrCl<60) did not have their renal function monitored more frequently as is suggested by NICE.

Summary Whilst the majority of patients have had their renal function tested in the last 12 months, a significant number are not having their weight checked. Accurate dosing of the NOACs therefore cannot be done as creatinine clearances are not being accurately measured. Incorrect dosing increases risks of adverse events such as bleeding. Findings from this study were presented at the two GP surgeries during practice meetings to raise awareness of the problem and incorrect doses were rectified.

47 A WIDE RANGE OF CATHETER ABLATIONS CAN BE SAFELY PERFORMED WITHOUT INTERRUPTING NOVEL ORAL ANTICOAGULANTS

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Introduction Catheter ablation, in the immediate peri-and post procedural period is associated with a transiently increased thrombogenic state secondary to atrial inflammation arising as a result of endothelial damage caused by manipulation of ablation catheters and/or ablation lesions. For atrial fibrillation (AF) ablations, the 2016 European Society of cardiology Guidelines recommend uninterrupted warfarin therapy in the peri-