Atrial fibrillation cases

**Case 1: Mr Geoff Jones**

Geoff is 64 years old, newly diagnosed with AF. He has no cardiovascular history (BP is 135/88 mmHg) and he does not smoke. He enjoys one small whisky at the end of the day, but never drinks otherwise. He has mild knee osteoarthritis, for which he takes naproxen 500 mg twice a day (with lansoprazole 15 mg daily) plus paracetamol when required up to 4 g per day. He is currently prescribed no other medication. His blood test results (FBC, LFT, U&Es) were all within the reference ranges.

Geoff and his wife Pauline, who is 68, are both retired teachers. Their 2 children, both new graduates, have found jobs some distance away and are only able to visit every few weeks. Geoff is the full time carer for his wife, to whom he is devoted: Pauline has moderate dementia (MMSE 16 when last assessed) – probably a mix of Alzheimer’s disease and multi-infarct dementia, as she has had several strokes and TIAs. Geoff is very worried about his risk of stroke after being diagnosed with AF.

Neither Geoff nor Pauline drive. They live in a city suburb about 25 minutes by bus from the city centre and a short (5 min) bus ride from the GP surgery. Visiting the main anticoagulant clinic would require a change of buses in the city centre: it’s about 20 minutes from there by bus.

Pauline attends a day centre 3 days a week: Geoff uses this time to do the necessary housework, arrange the supermarket delivery but most of all, to keep on top of their large flower and fruit/vegetable garden – their pride and joy, and ‘what keeps me sane!’, says Geoff.

**Notes**

* Geoff’s CHA2DS2-VASc score is 0 (but will be 1 in 6 months’ time when he turns 65). His HAS-BLED score is 1 (for the naproxen, but note he also takes a PPI), but will be 2 in 6 months’ time when he turns 65
* He is very worried about a stroke and its consequences for both him and Pauline.
* Attending the anticoagulant clinic would be very disruptive for Geoff (and Pauline). Could he self-monitor his INR if he chooses warfarin, or could the GP surgery or a local pharmacy provide monitoring support under appropriate funding arrangements?

**Case 2: Mrs Pat Barker**

Pat is 75 years old; she was diagnosed with AF 3 years ago. She also has type 2 diabetes (11 years: HbA1c is 63 mmol/mol [7.9%]) and hypertension (12 years, BP 142/88 mmHg). She stopped smoking 20 years ago and is teetotal. She has no established cardiovascular disease apart from her AF and hypertension. She has mild knee osteoarthritis. Her blood test results (FBC, LFT, U&Es) were all within the reference ranges .She has come in for a medication review. She is currently prescribed:

* Naproxen 500 mg twice a day
* Lansoprazole 15 mg daily
* Paracetamol when required up to 4 g per day
* Competact® (metformin 850 mg plus pioglitazone 15 mg) 1 tablet twice a day
* Simvastatin 40 mg 1 tablet daily
* Aspirin 75 mg daily
* Ramipril 10 mg daily
* Amlodipine 10 mg daily

A widow with no children and no close relatives nearby, Pat lives in a small village where she kept the village shop and post office (now closed). The village is about 15 miles from the nearest city and a similar distance from a market town in the opposite direction: there are anticoagulant clinics in both. She lives within walking distance of her dispensing doctor’s practice. Most of Pat’s time is taken up with looking after her ageing horse, Molly – Pat enjoys hacking round the lanes, but she and Molly have long since given up any more adventurous equestrianism. Driving her old Land Rover maintains her independence.

**Notes**

* Pat’s CHA2DS2-VASc score is 5, her HAS-BLED score is 2 (1 point for ‘elderly’, 1 point is for the naproxen and aspirin, but note she also takes a PPI).
* Was her aspirin started for primary prevention for her diabetes or her AF? Should she stop that and take no antithrombotic, switch to an anticoagulant, or take aspirin plus an anticoagulant? How well would Pat cope with taking another drug in addition to the 9 or more doses/day she has now?
* If she fell from Molly, she might have a head injury or fracture: what would be the consequences of any associated haemorrhage?
* There is a drug interaction between amlodipine and simvastatin
* Could Pat self-monitor her INR if she chooses warfarin, or could the GP surgery provide monitoring support under appropriate funding arrangements?

**Case 3: Mr John Newbiggin**

John is 78 years old, and has been newly diagnosed with AF. He also has type 2 diabetes (11 years: HbA1c is 63 mmol/mol [7.9%]), hypertension (12 years, BP 154/92 mmHg) and angina. He stopped smoking 5 years ago and says he drinks about 20 units of alcohol a week. He has mild knee osteoarthritis. His eGFR is 40 ml/min/1.73m2; his LFTs were within the reference range. His FBC was within reference range but his haemoglobin level was towards the lower end of normal. He is currently prescribed:

* Naproxen 500 mg twice a day
* Lansoprazole 15 mg daily
* Competact® (metformin 850 mg plus pioglitazone 15 mg) 1 tablet twice a day
* Simvastatin 20 mg 1 tablet daily
* Aspirin 75 mg daily
* GTN spray when required
* Ramipril 10 mg daily
* Amlodipine 10 mg daily

A widower with no children and no close relatives nearby, John is a retired shop manager who lives in a city suburb about 25 minutes by bus from the city centre and a short (5 min) bus ride from the GP surgery. Visiting the main anticoagulant clinic would require a change of buses in the city centre: it’s about 20 minutes from there by bus. John no longer drives.

**Notes**

* John’s CHA2DS2-VASc score is 4; it is 5 if his angina is counted as ‘vascular disease’. His HAS-BLED score is 4 (1 point each for hypertension [above target in type 2 diabetes], abnormal renal function, ‘elderly’, and ‘drugs’ [naproxen and aspirin, but note he also takes a PPI]). His HAS-BLED score could be higher if you think he could be anaemic and/or you are worried about his alcohol consumption.
* Should he stop his aspirin and take no antithrombotic, switch to an anticoagulant, or take aspirin plus an anticoagulant? How well would John cope with taking another drug in addition to the 9 or more doses/day he has now?
* Could John self-monitor his INR if he chooses warfarin, or could the GP surgery or a local pharmacy provide monitoring support under appropriate funding arrangements?

**Case 4: Mr Harry Brown**

Harry is 64 years old, newly diagnosed with AF. He has no cardiovascular history (BP is 135/88 mmHg). He stopped smoking 5 years ago and says he drinks about 20 units of alcohol a week. He has mild knee osteoarthritis, for which he takes naproxen 500 mg twice a day (with lansoprazole 15 mg daily) plus paracetamol when required up to 4 g per day. He is currently prescribed no other medication His eGFR is 40 ml/min/1.73m2; his LFTs were within the reference range. His FBC was within reference range but his haemoglobin level was towards the lower end of normal.

Harry’s wife, Sheila, is fit and well and they have no children. Harry works 3 days a week in an insurance office in the city centre, about 25 minutes by bus from his home. Despite his osteoarthritis, Harry is an active person who enjoys country walks, and he and Sheila drive out into the countryside most weekends for Sunday lunch. The main anticoagulant clinic is about 30 minutes by car from Harry’s house.

**Notes**

* Harry’s CHA2DS2-VASc score is score is 0 (but will be 1 in 6 months’ time when he turns 65). His HAS-BLED score is 2 (1 point each for abnormal renal function and ‘drugs’ [naproxen and aspirin, but note he also takes a PPI]). It will increase by 1 point in 6 months’ time when he turns 65, and could be higher if you think he could be anaemic and/or you are worried about his alcohol consumption.
* Could Harry self-monitor his INR if he chooses warfarin, or could the GP surgery or a local pharmacy provide monitoring support under appropriate funding arrangements?