Newly diagnosed Atrial Fibrillation

A 74 year old man awaiting a hip replacement to be done in two weeks' time is noted to have atrial fibrillation. He reports that he feels well and has not noticed anything unusual about his heart rate in recent weeks. He has not been noted to be in AF before, but most recent ECG was more than 12 months ago. The patient has a heart rate of 71 on ECG. He has a past history of hypertension which is well treated but is otherwise well. Exercise tolerance is limited by hip pain at present but he has previously been fit and active. How should this be managed?

Discussion: - (Advice from Cardiologists). Although the patient reports he feels well and no recent medical events, a focussed history and clinical examination should confirm this. FBC, UEC and thyroid function tests should be done, but will probably be normal. An echocardiogram to identify any valvular heart disease, and to assess left ventricle function. The findings on the Echo may lead to reconsideration of timing of surgery, or may change assessment of perioperative risk, particularly if there are segment wall-motion abnormalities. It may be falsely reassuring if the patient is not tachycardic in the absence of pharmacological rate control (as in this case), as it may imply impaired conduction may be exacerbated during anaesthesia. To clarify this, a ***Holter***[i] monitor recording is appropriate to check if he is going more slowly intermittently. (n.b. Holter recordings can be easily organised through the hospital cardiology, or through external private pathology services, covered by MBS.)

Opinions vary as to whether a new diagnosis of atrial fibrillation in general practice is necessarily an indication for referral for specialist cardiology evaluation. This may be particularly appropriate in younger patients where AF is less usual and hence may justify more detailed evaluation.

Should anticoagulation be commenced? Given the short time period in the lead up to surgery, traditional advice would have been to not start Warfarin, which takes time to stabilise, and then requires cessation four days preoperatively. The net risk per week of non-anticoagulated atrial fibrillation is low, even at higher CHADS scores. That said, if the patient's renal function is normal it would not be unreasonable to consider commencing a NOAC (e.g. apixaban or rivaroxaban) as they are 'easier to start and easier to stop':- they are relatively well tolerated by the patient, no need for dose stabilisation, and the cessation time preoperatively is less than with Warfarin. In this situation decision-making and drug choice would be appropriate to discuss with the general practitioner.

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[i] ***Historical footnote***:-

Note the spelling and capitalisation. It is not, as commonly thought, a misspelling of 'halter' (as in a fashion garment or tether around a horses head). The Holter monitor was developed at the Holter Research Laboratory in Helena Montana by experimental physicists Norman Jefferis "Jeff" Holter (1914 – 1983) and Bill Glasscock. (Their work would now be described as biomedical engineering.) They were inspired by a suggestion from the pre-eminent US cardiologist Paul Dudley White in the early 1950s, to work towards development of a wearable cardiac monitoring device. The Holter monitor was released for commercial production in 1962. Holter donated the rights to his invention to medicine.