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Editorial: Check a pulse – save a life

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An elderly lady is admitted to hospital following a collapse at home. On admission, her speech is confused and she is unable to move the left side of her body. A diagnosis of stroke is made. She also has an irregular pulse, and an ECG confirms that she has atrial fibrillation (AF). She was unaware of this condition, and was not taking an anticoagulant, despite regular visits to her GP surgery. Following a long stay in hospital, she is discharged to a nursing home, as she is no longer able to care for herself at home. The financial cost of her treatment runs to many thousands of pounds; the human cost is immeasurable.

Unfortunately, clinical scenarios like this are all too common in the UK. AF affects an estimated 2% of the population, rising to more than 10% in those over 80 years old (Zoni-Berisso et al, 2014). Many of these people are asymptomatic, with approximately 30–40% unaware that they have the arrhythmia (Quinn and Gladstone, 2015). This equates to around 250 000 people in the UK (National Institute of Health and Care Excellence (NICE), 2014). Unless their AF is picked up incidentally, these individuals with 'silent' AF will not be diagnosed, will not be assessed for stroke risk, and will receive no treatment. This is a major public health concern. AF increases stroke risk by an average of fivefold, with older patients and those with co-morbidities at the highest risk (Lip et al, 2010). The arrhythmia is responsible for around one in four strokes in the elderly, many of which are fatal or disabling (Gladstone et al, 2009). What makes the situation more unfortunate is that many of these strokes are preventable. Warfarin reduces the risk of stroke in people with AF by two-thirds, and the newer anticoagulants have a similar or greater efficacy (Hart et al, 2007; Dentali et al, 2012). These drugs are readily available, well-tolerated, and relatively inexpensive.

So, how can we identify these individuals with asymptomatic AF? AF results in an irregular heart rhythm, and this can be detected by checking the pulse (Quinn and Gladstone, 2009). In the past, pulse-checking was a routine part of many clinical encounters; however, the advent of electronic blood pressure machines has seen a decline in this practice. AF is frequently missed, even when individuals are attending regular appointments with a health professional. Calls for a national screening programme have been made, although it is uncertain whether this would be implemented, given the current financial crisis within the NHS (Arrhythmia Alliance, 2017). At a clinical level, improved detection is therefore likely to rest with improved awareness among health professionals, and opportunistic pulse-checking. Nurses can contribute to this by checking a pulse when seeing patients for routine appointments; for example, blood pressure or diabetic reviews. In a large UK study, opportunistic pulse-checking was found to be as effective as systematic screening (Hobbs et al, 2005). Because AF is more common in older people, screening should target those over 65 years old (Fitzmaurice et al, 2014).

The other way to improve the detection of AF is to increase awareness among the general public. This idea is the essence of Heart Rhythm week, which starts on the 5th of June. 'Identifying the undiagnosed person' is the theme this year, with the aim of making 1 million people pulse-aware, taking 10 000 pulse checks, and identifying 1000 people with an irregular pulse. There are several ways to get involved. The Arrhythmia Alliance is supporting a number of pulse-check events across the country, at which health professionals offer free pulse-checking to members of the public, as well as information about arrhythmias. In parallel, the charity is encouraging health professionals to check the pulses of friends and family members to raise awareness of arrhythmias, and to empower people to check their own pulse. People found to have an irregular pulse should visit their GP for an ECG; if AF is confirmed, they should be assessed for stroke risk, and offered anticoagulation if appropriate. Heart Rhythm Week runs from 5–11 June. Get involved— you might save a life.

More details about Heart Rhythm week can be found on the Arrhythmia Alliance website at http://www.heartrhythmalliance.org/aa/uk/heart-rhythm-week.

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