Choice of oral anticoagulants in older patients with non-valvular atrial fibrillation

Sir,
With the recognition that aspirin does not mitigate the risk of cardioembolic stroke attributable to non-valvular atrial fibrillation (National Institute for Health and Care Excellence, 2014) clinicians should anticipate an increase in the number of elderly patients with non-valvular atrial fibrillation taking oral anticoagulants instead of antiplatelet agents for prophylaxis against cardiogenic systemic embolism.

As a review by Eikelboom and Merli (2016) showed, the associated risk of both intracranial haemorrhage and severe gastrointestinal bleeding can be mitigated by judicious choice of oral anticoagulants. In that review of bleeding risk associated with three of the new direct oral anticoagulants (dabigatran, apixaban and edoxaban) *vs* warfarin, intracranial haemorrhage was shown to be significantly ($P<0.001$) less likely with any of those new anticoagulants than with warfarin. The risk of intracranial haemorrhage was lower with either the 150 mg twice daily or 110 mg twice daily dose of dabigatran, irrespective of age. Even with rivaroxaban intracranial bleeding was significantly ($P=0.02$) less likely than with warfarin.

Gastrointestinal bleeding, however, was significantly more likely with dabigatran 150 mg twice daily ($P<0.001$), rivaroxaban ($P<0.0001$) and edoxaban 60 mg/day ($P=0.03$) than with warfarin. In comparison with warfarin neither dabigatran 110 mg twice daily, apixaban or edoxaban 30 mg/day were associated with increased risk of gastrointestinal bleeding. In fact, edoxaban 30 mg/day was associated with significantly ($P<0.001$) lower risk of severe gastrointestinal bleeding than warfarin (Eikelboom and Merli, 2016).

Supporting these observations, among 225 patients (mean age 81 years) with mild head injury during oral anticoagulant therapy, the rate of intracranial haemorrhage was significantly ($P<0.05$) lower in patients treated with direct oral anticoagulants than in patients treated with warfarin (Riccardi et al, 2017).

The caveat is that dabigatran is the only direct oral anticoagulant to have a reversal agent, namely idarucizumab (Pollack et al, 2015).

Oscar MP Jolobe
Retired Geriatrician
Manchester Medical Society
Manchester M13 9PL
(oscarjolobe@yahoo.co.uk)

Eikelboom J, Merli G (2016) Bleeding with direct oral anticoagulants vs warfarin: clinical experience. *Am J Med* **129**(11S): S33–S40. https://doi.org/10.1016/j.amjmed.2016.06.003.

National Institute for Health and Care Excellence (2014) Atrial fibrillation: management. Clinical guideline [CG180]. www.nice.org.uk/guidance/cg180 (accessed 22 May 2017)

Pollack CV Jr, Reilly PA, Eikelboom J et al (2015) Idarucizumab for dabigatran reversal. *N Engl J Med* **373**: 511–520. https://doi.org/10.1056/NEJMoa1502000

Riccardi A, Spinola B, Minuto P, Ghinatti M, Guiddo G, Malerba M, Lerza R (2017) Intracranial complications after minor head trauma (MHI) in patients taking vitamin K antagonists (VKA) or direct oral anticoagulants (DOACs). *Am J Emerg Med* https://doi.org/10.1016/j.ajem.2017.03.072

BRITISH JOURNAL OF
HOSPITAL MEDICINE

Correspondence

If you would like to comment on any of the articles in *British Journal of Hospital Medicine*, please write in no more than 250 words to:

Professor Rob Miller, Editor-in-Chief, BJHM
c/o Rebecca Linssen, MA Healthcare
St Jude's Church, Dulwich Road, London SE24 0PB

Email: rebecca.linssen@markallengroup.com | Fax: 020 7978 8316

© 2017 MA Healthcare Ltd