Study shows local standards of care affect the benefits of switching to new treatement alternatives

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An analysis of a trial into how a new drug dabigatran was effective in preventing stroke in patients with atrial fibrillation has shown that local standards of care affect the benefits of switching to new treatments. This analysis of the RELY trial is reported in an Article Online First and in an upcoming *Lancet*, and is being presented at this week's European Society of Cardiology meeting in Stockholm, Sweden. The Article is by Professor Lars Wallentin, Uppsala University, Sweden, and colleagues.

The RELY study compared standard warfarin treatment with 110mg and 150mg twice daily doses of dabigatran. For warfarin treatment to be both safe and effective, blood tests are used to monitor its effects, which need to be kept within a very narrow window. This requires close monitoring and dose changes. As shown in the study there are large variations in standards of warfarin care between different centres and different countries. The standards of care can be estimated by averaging the time in the therapeutic range (TTR) for all warfarin treated patients in a centre (cTTR).This new analysis looked at whether or not the benefits shown by dabigatran in RELY were consistent even in centres that had poor INR quality control as estimated by cTTR.

The researchers showed there were fewer ischaemic strokes but not fewer occurrences of intracranial bleeding with increasing cTTR in the warfarin group. The value of cTTR had no effect influence on the the effect of dabigatran versus warfarin for preventing stroke. However,

concerning cardiovascular mortality, bleeding and all cardiovascular events there risks were higher at centres with lower cTTR. Therefore concerning these events advantages of dabigatran versus warfarin were considerably larger at sites with poor standards of care.

The authors say: "Thus, these findings support the superiority of 150mg dabigatran twice daily and the non-inferiority of 110mg dabigatran twice daily versus warfarin for protection against stroke in atrial fibrillation irrespective of the quality of INR control that a centre can achieve."

But they add: "For secondary outcomes, such as non-haemorrhagic events and mortaility, advantages of dabigatran were reported for sites with poorer INR control, whereas results were comparable in sites with better INR control. Overall, these results show that local standards of care affect the benefits of switching to new treatment alternatives."

In a linked Comment, Dr Deirdre A Lane and Professor Gregory Y H Lip, University of Birmingham Centre for Cardiovascular Sciences, City Hospital, Birmingham, UK, says the findings mean oral anticoagulants would probably be advocated for an even greater proportion of patients with atrial fibrillation, in view of the future availability of the new oral anticoagulants, such as dabigatran, that overcome the disadvantages of warfarin.

They conclude: "Until the new oral anticoagulants become widely available (a positive advance), we should advocate tight INR control at conventional levels, for which there is a wealth of evidence for benefit, and promote strategies to improve the management of therapy with vitamin K antagonists [such as warfarin]."

More information: www.thelancet.com/journals/lan … (10)61194-4/abstract

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