LETTER TO THE EDITOR

Approach to the patient with gastrointestinal bleeding and anticoagulation

In the year 2003 the Netherlands Association for Internal Medicine (NIV) published guidelines regarding upper and lower gastrointestinal bleeding. The result is a compact but complete summary concerning frequently seen problems in the practice of internal medicine. However, we have noticed a practical problem. In the case of first treatment to stabilise the patient when using the oral anticoagulant coumarin, the guidelines state that this should be corrected by either prothrombin complex (cofact) or fresh frozen plasma whenever it is indicated. Indications are haemodynamic instability or an international normalised ratio (INR) above 1.5. Our problem is the word 'or'. In daily practice it regularly occurs that a patient with upper or lower gastrointestinal bleeding is haemodynamically stable with an INR in the therapeutic range (between 2.5 and 4.5). In our opinion treatment with vitamin K is sufficient and safe, but the guidelines advise the expensive and potentially risky prothrombin complex or fresh frozen plasma. In the literature there is no evidence for the use of vitamin K, prothrombin complex or fresh frozen plasma in gastrointestinal bleeding and the guidelines are, at this point, based on expert opinions. In one report, successful haemostasis was achieved with endoscopic therapy in 91% of 52 patients with acute upper gastrointestinal bleeding after correcting the INR to 1.5 to 2.5, a success rate comparable with a control population of patients who were not anticoagulated.[1]

To that point we would advise formulating the text more carefully in order to prevent superfluous treatment. Our suggestion is to use prothrombin complex or fresh frozen plasma in case of haemodynamical instability. When the INR is above 1.5 this should be corrected in case of active bleeding and/or haemodynamical instability. If not, the use of vitamin K will be sufficient.

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REFERENCE

1. Choudari CP, Rajgopal C, Palmer KR. Acute gastrointestinal haemorrhage in anticoagulated patients: diagnoses and response to endoscopic treatment. Gut 1994;35:464-6.

REACTION FROM AUTHOR

Gaytant *et al.* have a semantic problem with the word 'or' in the paragraph on use of oral anticoagulant therapy in the guideline on bleeding in the gastrointestinal tract. First of all, it is regrettable that they did not use the opportunity to discuss specific comments through the website of the NIV prior to acceptance and publication of this guideline.
Gaytant *et al.* state that if the patient with bleeding and on coumarin therapy is haemodynamically stable with an INR within the therapeutic range, treatment with vitamin K is sufficient. They state that treatment with prothrombin complex is expensive and potentially risky. They are correct in stating that the advice to use prothrombin complex or fresh frozen plasma in these cases is based on expert opinion and not on evidence-based data. However, sound data are not available in the literature, so an expert-based opinion is all the committee had. If a patient presents with upper gastrointestinal bleeding the clinician can never predict for certain whether the patient will stay haemodynamically stable or whether the patient will go into hypovolaemic shock due to massive ongoing or recurrent bleeding. Use of coumarins is a definite risk factor. Haemodynamic stability in these patients can change dramatically in a matter of seconds. Endoscopy is necessary to determine the cause of bleeding and make an estimation on the risk of recurrent bleeding. If one bears in mind that mortality rates of upper gastrointestinal ulcer bleeding are still around 10%, regardless of all endoscopic therapy, it is advisable and safe to counteract the effects of coumarin use with the 'expensive' and 'risky' prothrombin complex or fresh frozen plasma. This is even more important since in normal daily practice it is often not possible to do immediate endoscopy and, hence, establish the cause of bleeding. Of course not every 'bleed' is a bleed, and not every bleed is clinically significant. Every clinician, in the daily emergency practice usually a resident, should take a careful medical history and make a clinical estimation of risk factors before asking for endoscopy or before starting treatment with prothrombin complex. If the patient appears to have significant bleeding or has many risk factors than it is certainly advisable to counteract the effects of coumarin derivates in the only proper way. The text of the guideline was very carefully formulated. It is a guideline and not a protocol. It is up to the judgement of every individual clinician whether he or she will take the risk of ongoing or recurrent bleeding when deciding to use oral anticoagulant therapy.

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