

Treatment of severe bleeding under oral anticoagulants - old and new strategies

ACCA Webinar

Thursday 24 March 2016 from 18:00 to 19:00 CET

Please read below the answers from the faculty to the non-answered questions asked during the Webinar:

- **Q: When monitoring anticoagulation reversal interventions what haemodynamic & biochemical parameters need to be checked?**

A : It depends on the severity of bleeding but as this webcast mainly dealt with severe bleedings we assume that most patients would need ICU monitoring of haemodynamics including heart rhythm, BP, rate. Patients in shock with appropriate IV lines and invasive BP. Blood values include lactate when patients are in Shock, but Hgb and Hct, platelets, APTT are mandatory. Remember that Hct might fall before decreasing Hgb is detected. When large volumes of blood products are given please consult attending at the Blood Bank / Transfusion Department. Other specific monitoring can be found according to the reversal agent used as outlined in the slides, i.e., most simple when Vitamin K is used - monitor INR.

- **Q : What life-style [e.g. dietary] modifications should be recommended to those started on NOACs (to minimise complications)?**

A: None really. One of the advantages of NOAC's are their effectiveness regardless of diet, contrary to Vitamin K antagonists. With very physically active patients, engaging in contact sports, the risk of bleeding should be mentioned.

- **Q : I do share the impression of an excessive intended undedosing in many patients. However this practice seems to have the same bleeding rates. Is there any data published about this fact?**

A: If we understand correctly, you mainly refer to underdosing of NOAC's. Probably you can expect similar bleeding rates in a single practice because the dosing is already "high" on the dose-response curve. However, in clinical trials we have seen less bleeding with adjusted dosing and modeling. However the proper dosing should be preferred to obtain the desired reduction in thromboembolic events.

- **Q : Should we use any special NOAC in triple anti-coagulat/platelet therapy in patients after ACS + AF ?**

A: No, but if such a strategy is chosen over Warfarin, the reduced dosing should be used.

- **Q : US FDA recently approved idaricizumab for dabigatran induced bleeding. In ESC any recommendation about this new drug ?**

A: Awaiting upcoming guidelines, you are at liberty to use the drug as indicated. This Webinar and the slides provide guidance.

- **Q : In terms of safety what is the better choice of OAC in elderly (>80 y.o.)?**

A: We prefer to start new patients on NOAC's due to the ease of administration/lack of monitoring and the 50% lower risk of intracranial bleeding.

➤ **Q : how can i manage patient on either type of anticoagulation planned for elective surgery with high risk of complications if bleeding occur like spinal or cranial surgery ?**

A: Please refer to ESC guidelines of A-fib and the 2012 Update. Briefly, INR < 1,5 in Warfarin treated. Pause 3-5 days with NOAC's

➤ **Q : When we can give again the VKA or NOACs after an attack of bleeding because of it?**

A: We understand what you mean, but always find and treat the actual cause of bleeding - OAC usually just accentuates it. RE-START ASAP (the day after), that is when the cause is treated, i.e. "the ulcer cryotreated".

➤ **Q : If a patient is taking apixaban 2.5 mg twice a day (but should be taking 5 mg twice a day) and comes to the emergency room with an episode of paroxysmal atrial fibrillation lasting more than 48 hours. Could we perform cardioversion or should we consider that he is not well anticoagulated?**

A: Terrific question to a daily clinical problem. For legal reasons and the patient safety you should consider the therapy suboptimal: if TEE is without thrombus you can do the cardioversion, alternatively increase the dose and wait 4 weeks.

➤ **Q : In case of thrombolysis what do we do?**

A: OAC is only a relative contraindication for thrombolysis. In STEMI, prefer primary PCI with radial access. In life threatening pulmonary embolism with haemodynamic compromise Thrombolysis should be considered despite OAC.

➤ **Q : Can we use NOAC for the treatment of left ventricular thrombus?**

A: Vitamin K is preferred. No data for NOAC's.

➤ **Q : What about NOAC before electrophysiological procedures and ablations?**

A: so far there are some smaller studies and position papers. NOAC's before ablations lack large randomized trials but locally is often performed. Usually a pause for 24-48 hrs before ablation is recommended, without bridging.

➤ **Q : Could a patient with Isch. CMP & renal impairment with INR 1.9 without any anticoagulation develop an LV thrombus ? & if so .. could this thrombus dissolve spontaneously?**

A: Yes, theoretically and in practice as it seems you have observed. If right sided heart failure or hepatic disease is the cause of the spontaneous INR rise cautious dosing of a Vit K antagonist is recommended or as an alternative (1-) 3 months of LMWH s.c. Spontaneous dissolution is unlikely and associated with embolic risks.

➤ **Q : Andexanet-antidot for ALL Xa inhibitors? And Ciaraparantag for all Xa inh or only for edoxaba?**

A: Yes indeed, andexanet alpha is a modified factor Xa molecule missing the catalytic subunit and therefore is able to bind all Factor Xa antagonists. However, the affinity of binding may be different

since the published data show, that different doses of andexanet alpha were used for antagonizing rivaroxaban or apixaban. Very little is known about ciraparantag, a small synthetic molecule which acts by hydrogen bond binding and charge-charge interactions which is supposed to bind all factor Xa antagonists and the factor II antagonist dabigatran and heparins. Thus, it might act as a more general antagonist for anticoagulants. however very little is known about the drug and no clinical data are published yet.

➤ **Q : How should we monitor NACO?**

A: No need, or rather rationale for monitoring INR in patients treated with NOAC. One of their major advantages over Warfarin.