

Management of High INRs in the Community

This protocol is intended to provide guidance to allow patients on oral anticoagulation with a vitamin-K antagonist, who are over-anticoagulated but do not have significant bleeding, to be managed appropriately in the community.

For severe asymptomatic over-anticoagulation or over-anticoagulation with mild bleeding, oral vitamin K is effective in most primary care settings. Small doses effectively reduce INR without fully reversing anticoagulation and reduce the risk of subsequent resistance to reanticoagulation.

The recommended preparation in this group of patients is **phytomenadione (Vitamin K) 2mg/0.2ml.** This is an intravenous preparation, **but it can be given orally**. The recommended dose corresponds to a very small volume and therefore appropriate oral syringes, (provided by the manufacturer) need to be used.

INRs ≥ 6 within working hours

- 1. For any point of care (POC) INR result, repeat the test. If second test >6 a venous INR result must be requested.
- 2. Anticoagulation clinic (or in North Somerset, the patient's GP) to telephone the patient or their carer immediately, establish reasons for high result.
- 3. If the patient has minor bleeding or has severe unexplained bruising, refer to (the Haematology Registrar if needed) and/or the patient's GP for advice and to arrange for Vitamin K to be prescribed for the patient. Vitamin K is recommended for all INRs >8.
- 4. Omit one or more warfarin doses (see flow chart below).
- 5. Re-test INR in one or two days. This should be before restarting the patient's warfarin if the INR was >6.

If you are unable to contact the patient, alert their GP service (or the GP out of hours service).

INRs ≥ 6 outside working hours

At UHBW, the on-call Haematology Registrar to follow the UHBW Protocol: *Management of Over anticoagulated Patients within the Community.* **At NBT**, the pathology department will contact the Out of Hours GP directly. The anticoagulant team will follow up all INRs >6 the following day with the patient.

- Make initial contact with the patient to advise them to stop warfarin, establish why INR control has been lost and advise patient when to have INR checked.
 NB. If it is felt clinically necessary to check an INR over the weekend it may be possible to arrange this to be done.
- 2. For UHBW, contact GP/Out of Hours **(OOH tel. 0117 2449283)** service where INR is >8.0 (therefore vitamin K required), if INR between 6.0 and 8.0 and there are concerns over bleeding after initial discussion with patient, or if unable to contact the patient after multiple attempts.

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Community stocks of vitamin K: A list of Pharmacies that should stock vitamin K is available <u>here</u>, including opening times. Please note that this list is not exhaustive and the pharmacy should always be contacted to ensure that stock is available. **Patient will need a prescription.**

There should be no need for the patient to attend the Emergency Department **unless** there is major bleeding. If there are any other safety concerns the patient should be appropriately assessed and admitted if needed.

High INR flow chart

INR 6.0 - 8.0 No bleeding or minor bleeding

e.g., nosebleed that is controlled or minor bruising

Carefully assess the patient for additional risk factors (e.g., age >70, epistaxis, previous bleeding complications, patient already taken warfarin since INR taken) and investigate cause of high INR..

Stop warfarin and consider restarting when INR <5.

INR >8 No bleeding or minor bleeding

Carefully assess the patient for additional risk factors and investigate cause of high INR. Safety-net for worsening or uncontrolled bleeding.

Stop warfarin.
Consider restarting
when INR <5

INR > 8 Administer PO vitamin K 1mg. NB: a lower dose (0.5mg) should be considered if high thrombotic risk.

INR> 10 Administer PO vitamin K 2.5mg.

INR> 12 Administer PO vitamin K 5mg.

Major bleeding

Stop warfarin. Arrange urgent admission to hospital for assessment.

Please contact UHBW Anticoagulant clinic on 01173423874 (Mon-Fri 9:00-17:30) or NBT on 07718 575 471 (Mon-Fri 9:00-17:00) for more information.

Haematology SpR if there are any clinical concerns that you wish to discuss: Mon-Fri 9am-5pm UHBW bleep 2677 NBT bleep 9441
After 5pm/weekends Adult Haematology SpR via switchboard

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