Practice Sting Unintended discontinuation of anticoagulants.

This Practice Sting is relevant for prescribers of anticoagulants, physicians, dosing advisors at thrombosis services, and pharmacists.

Explain changes in anticoagulant therapy clearly to the patient and verify that they understand it.

Incident

A physician intended to switch a patient from a vitamin K antagonist (VKA) to a direct oral anticoagulant (DOAC). The physician deregistered the patient from the anticoagulation service (Dutch: Trombosedienst. The Trombosedienst adjusts dosage regimens for patients using VKA based on the INR). He advises the patient to start the DOAC after approval from the anticoagulation service. Three days later, the anticoagulation service measured the patient's INR. After this measurement, the patient did not start the DOAC but received no new dosage schedules for the VKA either.
One month later, the physician received questions from the local pharmacist regarding the anticoagulation status, for which the physician referred the pharmacist back to the anticoagulation service. Unfortunately, this was too late for the patient, who suffered a major ischemic stroke in the meantime.

Recommendations

For physicians switching anticoagulant therapy

- Communicate the switch from VKA to DOAC (or vice versa) directly through the standard form used by the regional thrombosis service.
- If necessary, consult regional agreements regarding responsibility for determining the DOAC start date.
- Explain the switching procedure to the patient and verify comprehension, for example using the teach-back method. Also provide written information on the transition.
- Always send the DOAC prescription to the pharmacy yourself.
- Schedule a (telephone) follow-up appointment with the patient within one week after the expected DOAC start date, especially for those at high risk of thromboembolism.
- Inform the patients general practitioner about the planned switch.

For physicians and dosing advisors at thrombosis services / anticoagulation clinics

- Contact the patient via telephone or face-to-face on the day they can start the DOAC. Confirm this by email (or by letter if the patient has no email access).
- Verify during the conversation whether the patient has correctly understood when and how to start the DOAC, again using the teach-back method if appropriate.
- Communicate the DOAC start date immediately to the prescriber, general practitioner, and pharmacy of the patient.

For pharmacists

- Pay extra attention to first or second prescriptions of DOACs that are not collected. If this occurs, contact the patient to determine the reason for non-collection.

For regional anticoagulation centres

- Discuss whether a case like this could also occur within the region.
- Ensure that agreements regarding switching from VKA to DOAC (and vice versa) are sufficiently clear, consistently documented, and aligned among all involved parties. Re-emphasize these agreements to relevant healthcare professionals.

Analysis

Before a patient can safely start a DOAC, the VKA must first be discontinued. The International Normalized Ratio (INR) then determines the appropriate timing for DOAC initiation. The timing of the INR measurement depends on the VKA's half-life: for acenocoumarol, INR is measured after 1–2 days; for phenprocoumon, after 4–5 days. A DOAC may be started once the INR is below 2.0.

Whenever initiating a DOAC in former VKA users, physicians should consider scheduling a (telephone) follow-up shortly after the expected DOAC start date to confirm that the patient indeed initiated their DOAC therapy. This is especially important for patients at high thromboembolic risk, such as those with atrial fibrillation and a recent stroke/TIA or a recent venous thromboembolism.

In most Dutch regions, agreements exist between healthcare organizations and local anticoagulation services regarding initiation, (temporary) interruption, and switching of anticoagulation therapy. It remains essential to review these agreements regularly and re-communicate them to relevant healthcare professionals.

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