

Warfarin Reversal - Life Threatening Bleeding and INR \geq 2

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PURPOSE: To provide guidelines for emergent reversal of Warfarin in a patient with life-threatening bleeding and an INR \geq 2. Kcentra is a prothrombin complex concentrate and contains plasma-derived Factors II, VII, IX and X.

POLICY: The following are guidelines for the urgent reversal of Warfarin in the adult patient (> 15 years old) who has a life-threatening bleed and an INR \geq 2.

Kcentra should not be used for an INR < 2, minor bleeding or to reverse warfarin prior to non-emergent surgery because of the risk of thrombosis.

PROCEDURE STATEMENTS:

Guidelines:

- Confirm that the patient is on warfarin.
- Obtain CBC and Platelet count, creatinine, type and cross, and INR.

IF THE PATIENT HAS AN INR \geq 2 AND HAS LIFE-THREATENING BLEEDING:

Give the following

1. Kcentra (prothrombin complex concentrate) - one dose only, in Units of Factor IX /kg.
Dose based on body weight up to, but not exceeding 100kg.

Pre-treatment INR	2 - < 4	4 - 6	> 6
Dose in units FIX/ kg	25 u/kg	35 u/kg	50 u/kg
Maximum dose	2500 units max	3500 units max	5000 units max

2. Vitamin K 10 mg iv (dilute in NS or D5W and give slowly over 30 minutes.) Monitor for anaphylaxis.

Contraindications

- Kcentra should not be for an INR < 2, minor bleeding or for warfarin reversal prior to non-emergent surgery.
- Disseminated intravascular coagulopathy (DIC)
- History of heparin induced thrombocytopenia (HIT)

Caution

- A side effect of Kcentra is arterial and venous thrombosis
- Risk of thrombosis is higher if the patient had a thrombosis within 3 months

Follow up labs

INR Goal is \leq 1.5

INR should be checked 30 minutes after giving Kcentra

If the INR is still > 1.5 give plasma

Note: Patients, on warfarin, who also have liver disease may have deficiencies of more than just the vitamin K-dependent clotting factors. In this situation Kcentra (which replaces only FII, VII, IX and X) may not adequately reverse the INR. These patients may need plasma in addition to Kcentra..

IF THE PATIENT IS ALSO ON AN ANTI-PLATELET DRUG

(Aspirin, clopidogrel, prasugrel, ticagrelor, aggrenox)

- Give 2 units of platelets.