Warfarin metabolism:

Mechanism of action: Inhibits vitamin K dependent factors: **II, VII, IX, X and proteins C and S**. warfarin competitively inhibits the subunit 1 of the multi-unit VKOR complex, thus depleting functional Vit K reserves and hence reduces synthesis of active clotting factors **II, VII, IX, X**

Metabolism: Hepatic: <u>CYP2C9</u>, <u>2C19</u>, 2C8, 2C18, <u>1A2</u> and <u>3A4</u>.

Dosing adjustments in hepatic failure: There is no dosage adjustments provided in the manufacturer's labeling. However, the response to oral anticoagulants may be markedly enhanced in obstructive jaundice, hepatitis, and cirrhosis. INR should be closely monitored.

Dosing adjustment in renal failure: No dosage adjustment necessary. However, patients with renal failure have an increased risk of bleeding complications; monitor closely

Question:

Regarding dose adjustment for warfarin during hepatic failure the best thing is to:

- a. Reduce the dose
- b. Increase the dose
- c. Follow up with INR
- d. Follow up with PTT

Answer: C - The response to oral anticoagulants may be markedly enhanced in obstructive jaundice, hepatitis, and cirrhosis. INR should be closely monitored