Prophylaxis and Treatment of VTE in Renal Impairment

1. Aim
The aim of this policy is to provide guidance for using low molecular weight heparin (LMWH) in patients with renal impairment for prophylaxis and treatment of DVT / PE / ACS.

2. Introduction
This guidance is produced as a consensus statement by the nephrologists.

3. Risk Assessment
The risk of venous thromboembolism (VTE) must be assessed individually for every patient, which will be undertaken using the Trust’s agreed risk assessment tool.

Medical Thromboprophylaxis for DVT/PE:
DVT/PE thromboprophylaxis with dalteparin (Fragmin®) 5000 IU subcutaneously once daily, has not been associated with an excessive anticoagulant effect due to drug bioaccumulation and is unlikely to contribute to bleeding.[1] However if there is an underlying clinical problem which makes the patient a high risk for bleeding then seek advice. Age or renal impairment should not be a basis to reduce the dalteparin dose for thromboprophylaxis in patients with impaired renal function. Regular monitoring of Anti-factor -Xa levels is not recommended.

The recommended dose of dalteparin (Fragmin®), for DVT/PE thromboprophylaxis is 5000 IU once daily by SC injection

Treatment for DVT/PE and Acute Coronary Syndrome:

Treatment of DVT/PE:
Creatinine clearance >30ml/min = Treatment dose dalteparin (Fragmin®) SC once daily
Creatinine clearance < 30 ml/min = Enoxaparin 1mg/kg SC once daily

Treatment of ACS:
Creatinine clearance >20ml/min = Fondaparinux 2.5mg SC once daily
Creatinine clearance <20 ml/min = Enoxaparin 1mg/kg SC once daily
References