**Venous Thromboembolism (VTE) Prophylaxis in the Renal Unit**

*Royal Infirmary of Edinburgh*

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| **The following factors can increase the risk of VTE:**   |  |  |  | | --- | --- | --- | | * Age >60 years | * Recent surgical procedure | * COPD | | * Critical care admission | * Heart failure | * Thrombophilia | | * Dehydration | * Diabetes | * Sickle cell disease | | * Nephrotic syndrome | * BMI ≥ 40 | * COC/HRT or tamoxifen | | * Acute infection | * Myeloproliferative disorder | * Varicose veins | | * Immobility due to hospital admission | * Active cancer or chemotherapy | * Inflammatory bowel disease | | * Personal/family history of VTE | * Recent cardiac event or stroke | * Pregnancy or <6 weeks postpartum |   **If low risk, encourage mobility or consider mechanical thromboprophylaxis (TED stocking, Flotrons).**  **Thrombosis risk should be balanced with the risk of bleeding. Consult specialist registrar or consultant to assist with assessment if required. The following factors may increase the risk of bleeding:**   |  |  |  | | --- | --- | --- | | * Severe renal disease | * Planned procedure within 6 hours | * Active bacterial endocarditis | | * Platelets <70 x 109/l | * Post-surgery or biopsy | * Severe hepatic disease | | * Recent bleeding episode | * Major trauma | * Low dry weight (<46kg) |   **If pharmacological thromboprophylaxis indicated, assess renal function and consider the following:** | |
| eGFR > 30 ml/min/1.73m2 | SC dalteparin 5000 units daily |
| eGFR 10-30 ml/min/1.73m2 | SC dalteparin 2500 units daily  If very high thrombotic risk, consult specialist registrar or consultant – may consider 5000 units daily.  Monitor anti-factor Xa level after 10 days. |
| eGFR < 10 ml/min/1.73m2  or patients on renal replacement therapy/conservative management | No heparin for thromboprophylaxis unless high risk.  If high risk use SC dalteparin 2500 units daily. Monitor anti-factor Xa level after 10 days. |
| *\*If weight <46kg consider using CrCl instead of eGFR for estimation of renal function*  **Dose adjustment in extreme body weights**   |  |  |  | | --- | --- | --- | |  | **eGFR > 30 ml/min/1.73m2** | **eGFR ≤ 30 ml/min/1.73m2** | | **BMI ≥ 40** | SC dalteparin 7500 units daily | Max SC dalteparin 5000 units daily | | **Body weight <46kg** | SC dalteparin 2500 units daily | SC dalteparin 2500 units daily |   *\*Use dry weight*  **Guidance on anti-factor Xa monitoring**   * Target peak range is 0.1-0.4 units/ml. Please consult registrar or consultant if level recorded is not within target range * Order as **‘LMW Heparin assay’** on TRAK. Level MUST be taken 4 hours post dose * For patients requiring a biopsy, withhold SC dalteparin the evening before the procedure and take a trough anti-factor Xa level at the same time | |