

## South East London Guidance for Prescribing Enoxaparin

This document summarises the local guidance for the safe prescribing of enoxaparin in primary care. It is aimed at all health care professionals involved in the prescribing, dispensing or administration of enoxaparin for patients in South East London.

### **Request to transfer prescribing responsibility to primary care for patients on enoxaparin.**

- In most cases, once initiated, the prescribing of low molecular weight heparin (LMWH) therapy remains the responsibility of acute care.
- **The only LMWH approved for transfer of prescribing responsibility to primary care in South East London is enoxaparin. For all other LMWHs, prescribing remains the responsibility of the initiating clinician / clinical team / organisation. All patients being managed by Guys and St Thomas' NHS Foundation Trust will be prescribed dalteparin and all supplies should be provided by the hospital.**
- Primary care should only be requested to prescribe enoxaparin in the circumstances highlighted as suitable for transfer of care in Table 1 overleaf.
- GPs should never be asked to initiate enoxaparin treatment in primary care.

### **Key Safety Considerations when Prescribing Enoxaparin in Primary Care**

- Before agreeing to take on prescribing, the primary care clinician should ensure that they are confident of the diagnosis, dose, intended duration and monitoring of enoxaparin therapy.
- Essential information, including dose, bodyweight, renal function, indication and duration of treatment, must be communicated at the point of transfer of care.
- Dosing should be based on a recent accurate bodyweight.
- Dosing should be based on up to date prescribing information from the British National Formulary (BNF) or Summary of Prescribing Characteristics (SPC) for enoxaparin. If there are concerns regarding the dose, the primary care clinician should confirm with the initiating clinician.
- Dosing frequency often depends on indication – please check carefully whether the patient is prescribed once or twice daily doses.
- The intended duration of therapy should be clearly documented in the patient notes and discharge summary – a STOP date should be added to the repeat prescription where appropriate.
- In some circumstances, enoxaparin will be used outside of the licensed indication, such as in high risk pregnancy. Informed consent should be obtained and documented.
- Complex patients including paediatrics, patients with severe renal dysfunction (calculated creatinine clearance (CrCl) <30ml/min), very underweight (<50kg) or morbidly obese patients (>120kg), patients with severe hepatic impairment and those known to be at an increased risk of bleeding may require monitoring of Factor Xa levels and are therefore not suitable for transfer to primary care.

### **Monitoring of enoxaparin**

Careful re-assessment of the risk / benefit of continued enoxaparin therapy should be undertaken regularly.

Baseline full blood count (including platelets) and urea and electrolytes (U& Es) should be measured and CrCl calculated using the Cockcroft-Gault equation on transfer of care and at regular intervals throughout therapy

- Thrombocytopenia, if it occurs, usually appears between the 5<sup>th</sup> and 21<sup>st</sup> day of treatment. If platelet count drops below 30% of baseline – contact haematology for advice.
- Hyperkalaemia may occur with the risk increasing with longer durations of therapy
- If severe renal dysfunction occurs during therapy (calculated CrCl <30ml/min) - contact haematology for advice.

### **Administration of enoxaparin therapy**

Enoxaparin is usually administered by the patient or carer following training by the initiating team / organisation. In circumstances where this is not possible, a referral should be made to district nursing team to administer (although this should be a last resort).

**Note:** *District nursing referral for administration of enoxaparin should follow local processes, when treatment is stopped, this should be communicated clearly to the district nursing team/ service.*

**Table 1: Enoxaparin Prescribing Responsibilities**

<b>Subspecialty</b>	<b>Indication</b>	<b>Duration</b>	<b>Initiated by</b>	<b>Prescribed by</b>	<b>Monitored by</b>
<b>General Medicine / Anticoagulation</b>	Suspected or confirmed deep vein thrombosis (DVT) / pulmonary embolism (PE) initiation of treatment:  When international normalised ratio (INR) is sub-therapeutic and interim treatment is required (bridging) within first month of treatment of DVT / PE, or where a DVT / PE is suspected but not yet confirmed	Until target INR is achieved on warfarin OR initiation of a NOAC in line with license OR until a diagnosis of DVT / PE is excluded	Hospital / anticoagulant team	Hospital / anticoagulant team	Hospital/ Anticoagulation team
<b>Anticoagulation</b>	Patients requiring anticoagulation (e.g. mechanical valve in situ, AF, DVT/PE treatment) but unable to tolerate oral anticoagulant therapies	For duration of indication I.e. Valve / AF: indefinite DVT / PE 3-6 months or more if on-going risk of recurrence	Hospital / anticoagulant team	May be considered for transfer to of prescribing responsibility to primary care after 3 months of treatment	Hospital / anticoagulant team or GP following transfer of care
<b>Oncology</b>	Treatment and secondary prevention of DVT / PE in patients with cancer.  LMWHs are usually used first line in cancer related venous thromboembolism.  LMWH may also be given in place of warfarin for patients undergoing chemotherapy due to potential interactions with warfarin	Usually at least 6 months for DVT / PE. Extended duration as advised by specialist	Oncology team	Transfer of prescribing responsibility to primary care after six months when the need for a longer duration of LMWH has been established	Hospital oncology team or GP following transfer of care
<b>Pregnancy</b>	Treatment of DVT / PE in pregnancy	Until onset of labour and then on advice of specialist if to continue after birth	Obstetric specialist only	Obstetric specialist / haematology only	Obstetric specialist / haematology only
<b>Pregnancy</b>	All pregnancies requiring thromboprophylaxis	Until onset of labour and then on advice of specialist if to continue after birth	Obstetric specialist only	Obstetric specialist / haematology only	Obstetric specialist / haematology only
<b>Pregnancy</b>	Post-caesarean section	For six week post-C section	Obstetric specialist	Obstetric specialist / haematology only	Obstetric specialist / haematology only
<b>High-Risk surgery</b>	Extended prophylaxis of DVT /PE	For up to 5 weeks post procedure	Hospital surgical team	Hospital surgical team	Hospital surgical team
<b>Surgery</b>	Bridging of anticoagulant therapy pre-surgery	For up to 5 days pre-surgical procedure	Hospital surgical or anticoagulant team	Hospital surgical team or anticoagulant team	Not required

## References

1. Summary of Product Characteristics. Clexane pre-filled syringes, Sanofi. Date last updated 09.06.17. <http://www.medicines.org.uk/emc/>.
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3. NHS England Patient Safety Alert (January 2011): Reducing treatment dose error with low molecular heparins. <http://www.nrls.npsa.nhs.uk/alerts/?entryid45=75208>
4. South East London Area Prescribing Committee RAG list 2017. [http://www.lambethccg.nhs.uk/Pages/PageNotFoundError.aspx?requestUrl=http://www.lambethccg.nhs.uk/news-and-publications/meeting-papers/south-east-london-area-prescribing-committee/Documents/SEL%20APC%20RED,%20AMBER,%20GREY%20\(RAG\)%20List/SEL%20APC%20Adult%20RAG%20list%20July%202017.pdf%20-%20search=enoxaparin](http://www.lambethccg.nhs.uk/Pages/PageNotFoundError.aspx?requestUrl=http://www.lambethccg.nhs.uk/news-and-publications/meeting-papers/south-east-london-area-prescribing-committee/Documents/SEL%20APC%20RED,%20AMBER,%20GREY%20(RAG)%20List/SEL%20APC%20Adult%20RAG%20list%20July%202017.pdf%20-%20search=enoxaparin)
5. Royal College of obstetricians and Gynaecologists 2015. Reducing the risk of venous thromboembolism during pregnancy and the puerperium. Green-top guideline 37. <https://www.rcog.org.uk/globalassets/documents/guidelines/gtg-37a.pdf>
6. Mary Rehman. Prescribing Low Molecular Weight Heparins (LMWHs) guideline. NHS Wandsworth 2011 <http://www.wandsworthccg.nhs.uk/aboutus/Prescribing%20Guidelines%20v20/Low%20Molecular%20Weight%20Heparin%20-%20Guideline%20for%20GPs%20September%202011.pdf>