

## Improving the accuracy of enoxaparin prescribing for post-operative DVT prophylaxis

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Paisley's Orthopaedics Department prescribes enoxaparin for prophylaxis of thromboembolic events in elective and trauma post-operative patients. It is pertinent that this is prescribed at the correct dose adjusted for weight and renal function to ensure that prophylaxis is sufficient without increasing post-operative haemorrhage risk.

**Methods:** We undertook two periods of evaluation, both involving a retrospective review of both trauma and elective patient's case notes. The first loop examined 100 sets of case notes; the second examined 50.

We extracted the following:

- Admission dose of enoxaparin
- Was weight and creatinine clearance documented on admission?
- Was the prescribed dose correct?

### Results:

#### Cycle One

- 11%: Incorrect
- 7%: Creatinine clearance incorrectly calculated
- 4%: Weight <50kg

#### Intervention:

- Designed original posters highlighting the need for dose adjustment in patients with low weight/impaired renal function
- Display posters in clinical areas
- Incorporate poster into new staff induction packs
- Awareness amongst current staff raised through discussion and presentation of audit findings

#### Cycle Two

- 4% of prescriptions incorrect
- 2% of prescriptions dose too high, 2% dose too low
- Reduction in prescribing errors by 63.6%

### Discussion:

The two cycles have shown that prescribing error is a significant problem and patient safety is a concern particularly on surgical wards where haemorrhage risk is increased. Successful elements have been introduced which have shown a vast improvement in prescribing practice.

### Areas for further work:

- Continual staff education on the importance of correct prescribing
- Ensuring relief staff are aware through effective hand-over that admission bloods require chasing, creatinine clearance calculated, and enoxaparin dose adjusted.

### Biography

Robert Tyler and Dr. Laura Sayers are two junior doctors working in Paisley, Scotland. They both hope to become general and orthopaedic surgeons respectively. They are at the centre of a hospital and trust-wide change in the way enoxaparin (Clexane) is being prescribed in hospitals across the West of Scotland. They hope to take their work on safe prescribing to other countries by the way of conferences and research.

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