## Balancing the books

The enthusiasm to initiate new and often expensive treatments is not always balanced by an equally conscientious and consistent desire to stop unnecessary or ineffective medication. In view of this we reviewed the use of low molecular weight heparin for acute coronary syndrome in a district general hospital.

There is now considerable evidence that low molecular weight heparin, compared with unfractionated heparin, reduces composite end points of death, myocardial infarction or recurrent angina in an acute coronary syndrome[1–3]. Furthermore, LMHs have a more predictable pharmokinetic profile, high bioavailability, a long plasma half life, and are easily administered without the need to monitor APTT. We took the occurrence of an acute coronary syndrome to be the indication for starting treatment; that this should continue for at least 48 hours after the resolution of symptoms; and should not last more than 7 days (as the risk of bleeding outweighs the benefit)[4]. Treatment should be stopped 24 hours before discharge or exercise testing.

Over the 3 weeks study period 94% of the 47 patients presented with an acute coronary syndrome, the others with atrial fibrillation, cardiovascular accident with AF, abdominal pain thought to be cardiac but quickly diagnosed as gallstones. Treatment lasted from one to nine days and reflects the varied case mix. More significantly, however, was the number of days that patients received treatment after their symptoms had resolved. Sixty-four percent received treatment for more than 24 hours after the resolution of symptoms, and 38% continued after 48 hours representing an additional 132 or 72 doses respectively. Assuming a mean dose of 60mg bd, this represents an unnecessary £726 spent during the study period if treatment was stopped after 24 hours or £396 if stopped at 48 hours. Projected over the year the cost would be £12, 559 or £6,850 respectively. This figure, however, is likely to be higher since this study was performed outside the winter months when more patients are likely to present with an acute coronary syndrome. Furthermore, two patients underwent an exercise tolerance test whilst still on anoxaparin and four patients were discharged within 12 hours of stopping enoxaparin.

This audit highlights a potential problem for all clinical specialties as well as district general hospitals alike: the enthusiasm (often of junior staff) to initiate treatment is not always balanced by rigorous attention to stopping it. With the advent of new, exciting but costly therapeutic interventions there is an even greater need to balance the books and ensure the appropriate use of all resources.

### References


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