Letters to the Editor

Are the days of bedrails coming to an end?

SIR—Last year’s Letter to the Editor entitled “The prevalence of bedrail use in British hospitals” [1] found the prevalence of bedrail use to be 29.6% in the three district general hospitals surveyed. This was in contrast to the figure quoted by O’Keefe and colleagues of 8.4% [2]. We have recently surveyed our district general hospital. For the 587 acute medical, geriatric, surgical and rehabilitation beds, we found a prevalence of 28.1%. Our geriatric and acute medical wards are integrated and showed a combined bedrail prevalence of 23.6%. Our rehabilitation wards showed the highest prevalence of 47.7%. The overall prevalence is very similar to the figure that Milner and colleagues [1] found for district general hospitals.

We have also audited the incidence of bedrail-related accidents reported on incident forms over a nine-month period. We have found no correlation between bedrail prevalence on the ward and the number of accidents reported. Those wards with the most beds per total beds have shown the least reported accidents related to them, whereas some wards with very low bedrail usage have relatively high figures for bedrail-related accident reporting.

This we feel highlights some of the potential difficulties associated with bedrail use. Are bedrails any good at preventing falls from beds or do they make matters worse? Our figures tend to suggest that they make no difference one way or the other. We cannot be sure that accident reporting trends do not vary greatly from ward to ward. However our audit also showed that initial risk assessment of the need for bedrails and subsequent follow-up assessments were carried out infrequently across all wards regardless of accident or bedrail prevalence.

Perhaps we now need more specific guidance for bedrail use, as there are very few alternative options. Padded bedrails may help to avoid injuries due to entrapment between rails but will not stop patients climbing over or around them. Nursing patients on the floor is very demanding of nurses’ backs and would seem very undignified for the patient and distressing for the family to see. Increased awareness of the lack of usefulness and of the paucity of better alternatives may at least motivate staff to be more selective at choosing appropriate patients who may benefit from bedrails. They may also be more likely to inform families and the patient, where appropriate, why they are being used and the possible potential complications that may occur, despite our best efforts. Even with those changes the problem will not go away, which is why in our hospital we are considering centralising bedrail use, only allowing them for a few specific reasons and on a named-patient basis with padded bedrail protectors. The aim is to drastically reduce the total bedrail usage and prevent further accidents related to bedrails.


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Enoxaparin-associated spontaneous thigh haematoma

SIR—Enoxaparin, a low-molecular-weight heparin (LMWH) is being increasingly used in preference to unfractioned heparin as curative or preventive treatment of thromboembolic diseases, and it has also been indicated in the management of acute coronary syndromes [1]. An elderly patient is reported with renal failure who spontaneously developed a thigh haematoma while receiving enoxaparin therapy.

A 74-year-old woman (weight 70 kg) was admitted with a suspected pulmonary thromboembolism. She had hypertension treated with amlodipine and chronic renal insufficiency. She was not taking anticoagulant drugs. Physical examination was unremarkable. Complete blood count, international normalised ratio and activated partial thromboplastin time were within normal range. Her serum creatinine was 1.7 mg/dl with an estimated creatinine clearance (CLCr) of 29 ml/minute. Electrocardiogram, chest X-ray and pulse oximetry were normal. She was treated with enoxaparin subcutaneously, 70 mg every 12 hours (1 mg/kg). Two days later a CT scan and doppler-echography excluded thromboembolic disease. Enoxaparin was stopped. The same day the patient suddenly complained of left thigh pain where a little haematoma had appeared. Four days later she became pale, weak, hypotensive, tachycardic and a big swelling of the left thigh was seen. CT scan revealed a large left thigh haematoma (Figure 1, circles). Her haemoglobin level decreased to 7 g/dl with normal coagulation tests. The heparin anti-factor Xa (LMWH) level was 0.3 IU/ml (0.5–1.0 IU/ml). The patient received fresh-frozen plasma and 8 units of packed red blood cells. She was discharged in improved condition.

Major bleeding episodes are reported to occur at a rate of up to 5.2% with enoxaparin therapy [2]. Risk factors identified for the occurrence of LMWH-induced bleeding events are the use of high doses, advanced age, renal function impairment and the concomitant use of drugs affecting haemostasis such as aspirin [2]. Renal function plays an important role in the clear-
ance of LMWH. A linear correlation has been established between CLCr and anti-Xa concentration [3]. Patients with a CLCr <30ml/minute have demonstrated a 65% increase in anti-Xa activity. Enoxaparin treatment is applied to many elderly patients with thromboembolic disease and significantly reduced CLCr despite a normal serum creatinine level. This impaired CLCr has appeared as a common finding in all reported cases of spontaneous retroperitoneal haematoma associated with enoxaparin [4]. So, using 65% of the recommended enoxaparin dose may reduce severe bleeding complications in patients with CLCr <30ml/minute [5].

In conclusion, elderly patients treated with conventional doses of enoxaparin have an increased risk of bleeding complications, especially if they have impaired renal function. Therefore, caution should be applied in treating these patients and it is recommended that the therapeutic dose of enoxaparin be reduced.

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