
CONCLUSION

were lower in the LMWH group than in the UFH group. and all cause mortality at the end of follow up (RRR 37%, CI 15 to 53), major haemorrhage during the initial treatment (RRR 51%, CI 15 to 72), symptomatic recurrent VTE at the end of follow up (relative risk reduction [RRR] 44%, 95% CI 24 to 55), major

symptomatic recurrent venous thromboembolism, major haemorrhage, and all cause mortality.

Abstract and commentary also appear in ACP Journal Club.

Commentary

Previous meta-analyses comparing fixed dose LMWH with adjusted dose UFH for the treatment of acute VTE showed that LMWH reduces all cause mortality, and found trends for reduction of recurrent VTE and major bleeding.1,2 The meta-analysis by van Dongen et al used a comprehensive search strategy and included the most recent RCTs (all done after 1990) and thus presents an aggregate of the most current evidence. Furthermore, the large sample size shows that the review had sufficient power to find differences in efficacy. Their analysis confirmed that LMWH confers a survival advantage and significantly reduces the incidence of major bleeding and recurrent VTE. Limitations include the use of trials that compared LMWH with subcutaneous UFH, which may have contributed to the finding of superiority of LMWH; lack of an analysis examining whether the superiority of LMWH is maintained when limited to trials examining patients treated with LMWH primarily at home; the combining of 8 different LMWH preparations; and the small number of trials examining symptomatic PE. Despite these limitations, the rigorous methodology and consistency of the results with those of previous analyses support the main findings of improved outcomes with LMWH.

Although LMWH has previously been shown to be as safe and efficacious as UFH and to allow selected patients with VTE to be treated at home, many patients are still often hospitalised and treated with UFH.3 Potential barriers to home treatment with LMWH are medication cost, inconsistent availability of the medication from area pharmacies, patient education about self injection, and outpatient initiation of oral anti-coagulation.

Given the data showing that LMWH improves outcomes and provides the opportunity to avoid hospitalisation for many patients, it is time to overcome any remaining obstacles and adopt LMWH as the standard of care for appropriately selected patients with VTE.

Andrew Dunn, MD
Mount Sinai Medical Center
New York, New York, USA

1999;130:800–9.
2 Dolovich LR, Ginsberg JS, Douketis JD, et al. Arch Intern Med