Prolong dalteparin sodium prophylaxis in hip arthroplasty?

Prolonging low molecular weight heparin prophylaxis with dalteparin sodium significantly lowers the risk of deep vein thrombosis (DVT) in patients undergoing hip arthroplasty, report researchers from the North American Fragmin Trial.

In this study, 569 patients who were scheduled to undergo unilateral total hip arthroplasty were randomised to receive SC dalteparin sodium ['Fragmin'] initiated immediately prior to surgery (n = 199) or early after surgery (190) for 35 days, or inhospital warfarin ['Coumadin'].*;†

Benefits with dalteparin sodium

During the out-of-hospital study interval (days 6–35), the frequency of DVT was lower in patients who commenced dalteparin sodium preoperatively, patients who commenced dalteparin sodium postoperatively and all dalteparin sodium recipients combined, compared with warfarin recipients (5.3, 4.3 and 4.8 *vs* 10.5% of patients, respectively). The corresponding proportions of patients experiencing proximal DVT were 1.3, 0.7, 1 and 4.8%, respectively.

In addition, the cumulative frequencies of DVT during days 0–35 were significantly lower in patients who commenced dalteparin sodium preoperatively, patients who commenced dalteparin sodium postoperatively and all dalteparin sodium recipients combined, compared with warfarin recipients (17.2, 22.2 and 19.7 *vs* 36.7% of patients, respectively). The corresponding proportions of patients experiencing proximal DVT were 3.1, 2 and 2.6 *vs* 9.2%, respectively; the differences between dalteparin sodium and warfarin recipients were significant.

No patients experienced major bleeding episodes during days 6–35. However, significantly more dalteparin sodium, compared with warfarin, recipients, experienced episodes of trivial bleeding.

* The study was supported by Pharmacia & Upjohn.

† The dalteparin sodium regimens consisted of an initial SC 2500IU dose given within 2 hours prior to surgery and a second dose administered ≥ 4 hours postsurgery or postoperative dalteparin sodium only; all patients subsequently received SC dalteparin sodium 5000IU once daily for 35 days. The warfarin treatment regimen consisted of oral warfarin administered inhospital for 6 days followed by SC placebo for 35 days.

Hull RD, et al. Low-molecular-weight heparin prophylaxis using dalteparin extended out-of-hospital vs in-hospital warfarin/out-of-hospital placebo in hip arthroplasty patients: a double-blind, randomized comparison. Archives of Internal Medicine 160: 2208-2215, 24 Jul 2000

800839326