Title of the Contribution: Prevention of major venous thromboembolism following total hip or knee replacement: a randomized comparison of low-molecular-weight heparin with unfractionated heparin (ECHOS Trial).

Abstract:

AIM: Venous thromboembolism remains a frequent complication after total hip or knee replacement surgery despite routine prophylaxis. However, the ability of pharmacologic thromboprophylaxis to prevent major venous thromboembolism, defined as proximal deep vein thrombosis, and/or pulmonary embolism, and/or death, has not been previously validated.

METHODS: In a double-blind randomized study, 2018 patients, undergoing either total hip or knee replacement surgery, were allocated to receive subcutaneous preoperative reviparin (4,200 anti Xa IU) once daily or 7,500 IU unfractionated heparin twice daily, for a minimum of 11 days. The primary efficacy outcome was major venous thromboembolism, defined as the composite of venographically confirmed proximal deep vein thrombosis, and/or symptomatic pulmonary embolism and death, recorded up to day 14.

RESULTS: The primary efficacy outcome was assessed in 1,628 patients and demonstrated a significant reduction in the reviparin group (3.4% [28 of 813 patients] compared with unfractionated heparin (5.5% [45 of 815]) (odds ratio, 0.61; 95% confidence interval, 0.38 to 0.99, P=0.04) by day 11 to 14. A significant reduction in venous thromboembolism was maintained up to 6-8 weeks (3.4% [28 of 813 reviparin patients]...
versus 5.6% [46 of 815 unfractionated heparin patients]) (odds ratio, 0.6; 95% confidence interval, 0.37 to 0.97, P=0.03). Major bleeding events occurred in 9 reviparin-treated patients (0.9%) and in 12 unfractionated heparin-treated patients (1.2%). CONCLUSIONS: Prophylaxis with reviparin significantly reduces the risk of major venous thromboembolism compared with unfractionated heparin in patients undergoing elective hip or knee replacement without increasing the risk of bleeding.

Zeitschriftentitel / Abkürzung:
Int Angiol

Jahr:
2006

Band:
25

Heft / Issue:
4

Seiten:
335-42

Sprache:
eng

Pubmed:

Print-ISSN:
0392-9590

TUM Einrichtung:
r experimentelle Onkologie und Therapieforschung

Occurences:
- Einrichtungen > Fakultäten > Fakultät für Medizin > Kliniken und Institute > Institut für Experimentelle Onkologie und Therapieforschung > 2006

entries: