Aspirin or Rivaroxaban for VTE Prophylaxis after Hip or Knee Arthroplasty

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A multicentre, double-blind, randomized, controlled clinical trial of patients who underwent total hip or knee replacement surgery showed that aspirin was as effective as rivaroxaban, the standard anti-coagulation medication, at preventing post-operative venous thromboembolism (VTE). Montreal's Jewish General Hospital (JGH) was among the participating institutions. The results were published in the prestigious New England Journal of Medicine.

All 3424 patients enrolled in the trial (1804 for hip replacement and 1620 for knee replacement) took rivaroxaban for five days after surgery before being randomized either to receive aspirin (1707 patients) or to continue with rivaroxaban (1717 patients). Eleven in the former group and 12 in the latter experienced VTE. The most worrisome complication from anti-coagulants is bleeding. In this trial, rates of clinically important bleeding were less than 1.5% and did not differ significantly between the two groups. All bleeding events occurred at the surgical site, as opposed to other, potentially more dangerous, regions such as the brain or gastrointestinal tract. As a result, aspirin could emerge as a practical alternative to more expensive anticoagulants.

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