

Pre-op methylprednisolone beneficial in knee arthroplasty

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(HealthDay)—For patients undergoing elective unilateral total knee

arthroplasty, preoperative administration of methylprednisolone is associated with reduced circulating markers of endothelial activation and damage, according to a study published online July 28 in *Anaesthesia*.

Viktorija Lindberg-Larsen, M.D., from Copenhagen University Hospital in Denmark, and colleagues randomized 70 patients undergoing elective unilateral [total knee arthroplasty](#) to receive preoperative intravenous [methylprednisolone](#) 125 mg or [isotonic saline](#) in a 1:1 ratio. Using a standardized multimodal analgesic regime, all procedures were performed under spinal anesthesia without a tourniquet.

The researchers found that, compared with saline, methylprednisolone significantly reduced markers of endothelial damage at 24 hours following surgery (adjusted means expressed by circulating Syndecan-1: 11.6 versus 13.4 ng/mL⁻¹ [P = 0.046]; soluble thrombomodulin: 5.1 versus 5.7 ng/mL⁻¹ [P = 0.009]; sE-Selectin: 64.8 versus 75.7 ng/mL⁻¹ [P = 0.001]; and vascular endothelial growth factor: 35.3 versus 58.5 ng/mL⁻¹ [P patients with high baseline values. Methylprednisolone also correlated with a reduction in C-reactive protein response 24 hours postoperatively (31.1 versus 68.4 mg/L⁻¹ [P

"These findings may have a positive effect on surgical outcome, but require studies in major surgery," the authors write.

More information: [Abstract](#)
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