



Re: Deep Neuromuscular Blockade Improves Surgical Conditions During Low-Pressure Pneumoperitoneum Laparoscopic Donor Nephrectomy

Özdemir-van Brunschot DMD¹, Braat AE², van der Jagt MFP¹, Scheffer GJ³, Martini CH⁴, Langenhuijsen JF⁵, Dam RE², Huurman VA², Lam D², d'Ancona FC⁵, Dahan A⁴, Warlé MC¹

¹Radboud University Medical Centre, Department of Surgery, Division of Vascular and Transplant Surgery, Nijmegen, The Netherlands

²Leiden University Medical Center, Department of Surgery, Leiden, The Netherlands

³Radboud University Medical Centre, Department of Anesthesiology, Nijmegen, The Netherlands

⁴Leiden University Medical Centre, Department of Anesthesiology, Nijmegen, The Netherlands

⁵Radboud University Medical Centre, Department of Urology, Nijmegen, The Netherlands

Surg Endosc 2017. doi: 10.1007/s00464-017-5670-2.

EDITORIAL COMMENT

In this small blinded randomized controlled multicenter trial, the authors have evaluated the effect of deep neuromuscular blockade (NMB) on surgical conditions during low pressure pneumoperitoneum (PNP) laparoscopic donor nephrectomy. Previous evidence supports that low-pressure PNP (6 mmHg) reduces post-operative pain, but sometimes may restrain visibility and surgical access. By applying deep NMB authors were able to demonstrate lower post-operative opiate requirement besides improvement in surgical conditions. Although not significant, insufflation pressures were lower in the deep NMB group. In four patients in the moderate NMB group, major intraoperative complications occurred in whom two required conversion to open procedure have had occurred. Given the relatively high incidence of intraoperative complications and conversions to open donor nephrectomy, the use low-pressure PNP with moderate NMB may compromise safety during surgery.

Yarkin Kamil Yakupoğlu, MD