



and Other Interventional Techniques

Laparoscopic vs open nephrectomy in 210 consecutive patients

Outcomes, cost, and changes in practice patterns

A recent article by K. W. Kercher, B. T. Heniford and B. D. Matthew et al., demonstrated fewer hospital days, fewer complications and more rapid recovery with laparoscopic nephrectomy than with open surgery. The benefits of laparoscopy are becoming more apparent with improvements in techniques. Until recently, laparoscopic pneumoperitoneum was initiated and maintained by carbon dioxide gas at 20°C and less than 0.0002% relative humidity. It has been shown that the use of heated humidified gas for laparoscopy is beneficial in terms of reduced hypothermia, reduced postoperative pain scores, shortened recovery time, reduced pain medication use, and less peritoneal damage [1–5]. Our group at the University of Minnesota found results similar to those reported by Kercher when we used cold dry gas for insufflation, additional improvements were demonstrated when the gas was insufflated at 35°C and 95% relative humidity using the Insuflow device. We used the device for 10 laparoscopic donor nephrectomies and compared it with 10 contemporaneous controls conditions in which the device was not used. Although the length of hospital stay and analgesic requirements were not different between the groups, we found that the Insuflow patients had a decreased incidence of shoulder pain and rigor. At the end of the procedure 70% of the control group were hypothermic (< 36°), as compared with none in the Insuflow group. We reported this experience at the Society of American Gastrointestinal Endoscopic Surgeons (SAGES) 2003, and since then, it

has become standard practice to use heated humidified gas in all our laparoscopic nephrectomies.

References

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