

## TRANSPLANTATION

## Prophylactic fenestration: prevention is better than cure

Lymphocele formation is a common complication after kidney transplantation and usually requires surgical or radiological intervention. Results from a new study show that prophylactic fenestration of the peritoneum at the time of transplantation reduces the incidence of symptomatic lymphoceles. “As lymphocele formation increases morbidity and length of hospital stay for affected patients, and also adds to the work-load and costs for our department, we were eager to find means to preventing this complication,” explains lead investigator Tim Scholz of the Department of Organ Transplantation, Gastroenterology and Nephrology at Oslo University Hospital, Norway.

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The investigators enrolled adult recipients of kidney grafts between 2007 and 2009 and randomly assigned them to undergo peritoneal fenestration ( $n = 69$ ) or the standard surgical procedure ( $n = 61$ ). All transplantations were performed using the extraperitoneal method with placement of the kidney graft in the left or right iliac region. In the fenestration group, an incision in the peritoneum parallel to the skin incision with a length at least as long as that of the kidney transplant was made after transplantation. The primary end point of the study was incidence of symptomatic lymphocele 1 year after transplantation. The secondary end point was prevalence of perirenal fluid collections in the first, fifth and tenth week after surgery, as measured using ultrasound.

Of the 130 patients who underwent randomization, 124 patients were treated according to the protocol and their data used in the analyses. The researchers found that 15.5% of patients in the standard group experienced lymphoceles that needed treatment during the first postoperative year as compared with 3% of the intervention group. Symptomatic lymphoceles were diagnosed a median of 38 days after transplantation. Treatment of the 11 patients who were diagnosed with lymphoceles led to 10 readmissions and 43 days of hospitalization, all in the standard group. The prevalence of fluid collections was higher in the standard group than in the fenestration group in the fifth week after surgery. However, a trend towards more intestinal and ureter complications was observed in the fenestration group than in the control group.

“We are planning a prospective randomized trial to evaluate whether the placement of a single surgical drain at the time of transplantation could lower the incidence of lymphocele formation,” comments Scholz. “In addition, we are aware that the amount of steroids given to transplant patients could be critical for the incidence of lymphocele. We reduced the protocol-based dosage of steroids in kidney transplantation in our department 2 years ago, and are planning a retrospective study to evaluate the incidence of lymphocele before and after this reduction.”

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