

Fibrin glue is useful in preventing early dialysate leakage in children on chronic peritoneal dialysis

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Abstract

OBJECTIVE: To assess if application of fibrin glue sealant to the peritoneal cuff suture is useful in the prevention of early dialysate leakage in children with end-stage renal disease on chronic peritoneal dialysis (CPD). **DESIGN:** Single-center, open-label, prospective randomized study. **SETTING:** University Pediatric Hospital. **METHODS:** 52 catheters were implanted in 45 children (mean age 6.2 +/- 4.5 years). Catheters were randomly assigned to either the control group or the sealant group. In the latter group, 1 mL of fibrin glue sealant was applied to the peritoneal cuff suture. 18 catheters were used for the first time within 5 days after implantation (early-used catheters). Leakage, exit-site or tunnel infection, peritonitis, and adverse secondary effects were evaluated during the initial 60 days after implantation. **RESULTS:** No adverse secondary effects were seen after the application of the fibrin glue sealant. The incidence of exit/tunnel infection and peritonitis was similar in the two groups. The incidence of leakage was significantly lower in the sealant group ($p < 0.02$). In the early-used catheters, leakage was detected in 9% of the catheters in the sealant group and in 57% of the control group ($p < 0.05$). **CONCLUSIONS:** The application of 1 mL of fibrin glue to the peritoneal cuff suture prevented early dialysate leakage without secondary adverse effects in children on CPD.

We recommend

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