

## **Application of Fibrin Glue for Persistent Vesicourethral Anastomotic Leak after Radical Prostatectomy**

**Introduction and Objective:** A vesicourethral anastomotic leak after radical prostatectomy is a common postoperative complication. Rarely additional intervention is required for a persistent or high output urinary leak. We describe a novel solution to this complication.

**Materials and Methods:** With the patient under local anesthesia the technique included 20Fr rigid cystoscopy and injection of skin glue Histoacryl® (n-butyl-cyanoacrylate)/lipiodol with fibrin glue into any anastomotic gap under fluoroscopic guidance. We monitored urine output and the relative amount of leak. The Jackson-Pratt drains were removed after leakage decreased to 50 ml or less per day. All patients underwent cystography to ascertain leak resolution before Foley catheter removal.

**Results:** Nineteen of 1,828 patients (1.0%) required intervention for a prolonged or high output anastomotic leak after radical prostatectomy. Mean time from radical prostatectomy to cystography was 7.4 days (range 5 to 20). Mean time from surgery to glue injection was 16.3 days (range 6 to 36). Foley catheter was indwelling during mean duration of 12.9 days (range 3 to 31) after cystoscopic glue injection, enabling complete resolution of the leak. Mean time to recovery of urinary continence was 5.8 months (range 0.7-24.2).

**Conclusions:** Cystoscopic injection of fibrin glue into the anastomotic gap is a safe, effective solution for a prolonged or high output anastomotic leak after radical prostatectomy.