Fibrin Glue Injections: A Minimally Invasive and Cost-Effective Treatment for Post-Renal Transplant Lymphoceles and Lymph

Fistulas.

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Abstract:

Pelvic lymphoceles/lymph fistulas are commonly observed after kidney allotransplantation,

especially when the kidney is placed in a retroperitoneal position. While the majority are <5 cm in

diameter and resolve without intervention, some may continue to enlarge, and cause local or

systemic symptoms or graft dysfunction. Among 1662 recipients of both living and deceased donor

kidney transplants between January 2003 and July 2014, we found 46 (2.7%) patients with

symptomatic lymphoceles requiring intervention. We studied the clinical outcomes and charges for

three treatment modalities including open surgical drainage (22), laparoscopic surgical drainage

(11), and percutaneous fibrin glue injections into the drained lymphocele cavity (13). The patient

demographics and clinical characteristics were comparable for each treatment group, although

maintenance immunosuppressive drugs differed by era. We found fibrin glue injections resulted in

significantly lower (p = 0.04) rates of recurrence (1; 7.7%) than either laparoscopic (6; 54%) or open

surgical drainage (6; 27.3%). In addition, fibrin glue injections generated significantly (p < 0.001)

lower median (\$4559) charges compared to either laparoscopic (\$26 330) or open surgical drainage

(\$23,758). Fibrin glue treatment has the advantage of being an outpatient procedure, performed with

the patient under local anesthesia, and does not incur the expense of an operative procedure or

hospital admission associated with laparoscopic or open surgery.

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