

# **Fibrin glue assisted 3-suture vasovasostomy.**

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## **Abstract:**

**Purpose:** We report on the early results of fibrin glue assisted, 3-suture microsurgical vasovasostomy (FGV) technique in humans. **Materials and Methods:** After Institutional Review Board approval, 42 patients were enrolled prospectively from October 2002 to March 2004. Patients underwent microsurgical 3-suture vasovasostomy with completion of the anastomosis with fibrin sealant. Patient and partner age, obstructive interval, female fertility status, gross appearance and presence of sperm on microscopic examination of vasal fluid, operative time, and pregnancy were noted. Semen analysis (SA) was obtained at 6 weeks, 3, 6, 9 and 12 months postoperatively. **Results:** Of 42 patients 39 had postoperative SA. Mean followup was 6.2 months (range 1.5 to 12). Mean operative time was 79.4 minutes (range 50 to 120). The overall patency rate was 85% (33 of 39). Patency rate according to obstructive interval less than 3 years was 100%, 3 to 8 years 94%, 9 to 14 years 69% and 15 years or more was 67%. Patency rate with sperm on intraoperative SA was 96% (27 of 28) and 55% (6 of 11) with sperm absent. Nine pregnancies have been documented. **Conclusions:** FGV is potentially less time-consuming than standard microsurgical vasovasostomy, and may be appropriate for patients with sperm on intraoperative SA or a negative intraoperative SA, and an obstructive interval of 10 years or less. Patients without these findings should be considered for vasoepididymostomy. While the early results of FGV are promising, a larger study group with the ability to obtain longer followup is required to definitively establish equivalency to standard microsurgical vasovasostomy. Copyright © 2005 by American Urological Association.