FERTILITY OUTCOME AFTER REDO-VASOEPIDIDYMOSTOMY
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INTRODUCTION AND OBJECTIVES: Epididymal obstruction has been historically treated with surgical reconstruction. The purpose of this study was to determine if it was worthwhile for patients who have failed prior vasoepididymostomy (VE) to undergo another surgical reconstruction or should they be advised to undergo sperm acquisition and assisted reproductive technique (ART).

METHODS: Eighteen patients underwent a redo-vasoepididymostomy (RVE) performed by a single urologist (AJT). They were divided into three groups based on the etiology of their obstruction: I, prior vasectomy an VE (4), II, congenital (7), and III, inflammatory (7). Data was available regarding time of obstruction between VE and RVE, quality of epididymal fluid, levels of anastomoses, subsequent semen analyses for all 18 men, and pregnancy rates based on more than 18 months follow-up for twelve.

RESULTS: The mean age at the time of RVE was 40.6 years (50.5, 36, and 39.4 years for groups I, II, and II respectively). The mean time interval between VE and RVE was 19 months (range: 12-41 mos). Ten patients underwent unilateral and eight bilateral anastomoses. RVE was to the cauda in 1, the corpus in 13, and the caput in 12. Epididymal fluid was clear with motile sperm in 7, clear with immotile sperm in 3, opaque with motile sperm in 9, and opaque with immotile sperm in 7 epididimides. The overall patency rate was 66.7% (12/18) with sperm in the ejaculate in 75%, 85% and 42.85% of the three groups, respectively. Natural conception occurred with 3 (3/12, 25%) men (3 caput and 1 cauda anastomoses). All three had congenital obstructions. Two patients in group I established pregnancy with cryopreserved sperm extracted at the time of RVE. One man in group I and another in group II achieved pregnancies with microsurgical epididymal sperm aspiration/ICSI after RVE failed.

CONCLUSIONS: The patency rates after RVE are encouraging. Natural conception occurred in 25% of patients followed more than 18 mos. Inability to establish pregnancy in the remaining 7/9 patients who had sperm in their semen with a follow-up for pregnancy rates may be due to persistent epididymal dysfunction or partial obstruction and subsequent poor sperm function. Aspiration of motile sperm and cryopreservation was possible at 11/18 at the time of RVE and should be recommended in the event that the patient remains azoospermic after surgery. It is worthwhile to offer RVE to patients who had failed prior VE.