Screening vasectomy candidates for risk of subsequent vasectomy reversal. FF Pasqualotto, A Agarwal, AJ Thomas, Jr., and J Potts. Andrology Research & Clinical Laboratories, Department of Urology, The Cleveland Clinic Foundation, Cleveland, OH.

Objectives: About 500,000 vasectomies are performed yearly in the USA, and it is estimated that approximately 5% to 10% of men who undergo vasectomy will request reversal. Given the high financial cost of reversal and the difficulty of ensuring fertility afterwards, we sought to identify characteristics that predict which patients may request reversal.

Design: Case-control retrospective study.

Materials and Methods: We reviewed the 655 medical charts of all patients who underwent either vasectomy for elective sterilization (n = 365) or vasectomy reversal (n = 290) at our institution from 1990 to 1997. Data were collected on patient age at the time of vasectomy, religion, occupations of the couple, number of marriage, number of children, reason for reversal, and the number of years between vasectomy and vasectomy reversal. Univariate relationships between reversal and non-reversal were analyzed with the Wilcoxon rank-sum tests for continuous or ordered variables (age, and number of children, respectively) and the Chi-square test for discrete variables (religion).

Results: Vasectomy reversals were performed in patients who were younger (20 to 29 years) (P<0.001) at the time of their vasectomy as well as in those couples in which both the wife and husband were employed (P<0.001). Vasectomy reversal occurred 12.5 times more often (95% confidence interval [CI] = 7.6 to 20.7) in this age group than in others. Couples in which only one spouse was employed requested reversal 0.48 times less often (95% CI = 0.33 to 0.71) than couples in which both were employed. Age at vasectomy, and the reason for reversal (remarriage, median: 9 years) were significantly related to the timing of reversal as compared to other reasons (median: 6 years) (P<0.001). Younger men (ages 20 to 29) requested a reversal relatively later after vasectomy (median: 10 years) compared to patients in other age groups (40 years; median: 5 years) (P <0.001).

Conclusions: We found that patients requesting vasectomy reversal tend to be young at the time of vasectomy. A higher rate of reversal was seen in couples in which the wife was employed, possibly because these couples are financially more secure and can afford the expenses of the surgery and raising a child. Our findings clearly demonstrate the importance of pre-vasectomy counseling and informed consent. We believe that young couples should receive particularly thorough counseling about other available birth control options and the option of sperm banking before vasectomy. As younger men are much more likely to request future reversals later in their lives, they should be made aware of the high cost of reversal surgery, and the difficulty of ensuring fertility after vasectomy reversal.