Should A Semen Analysis Be Ordered In A Man With History Of Previous Fertility?

F. F. Pasqualotto, E. B. Pasqualotto, K. S. Ogliari, A. Agarwal; Conception - Center for Human Reproduction and University of Caxias do Sul, Caxias do Sul, Brazil, Cleveland Clinic Foundation, Cleveland, OH

Objective: There is a misconception that men who have previously established a pregnancy may still be fertile when they later present with a complaint of infertility. The goal of our study was to determine if the previous fertility history can predict current fertility status of a patient examined for couple’s infertility.

Design: Retrospective case-control study, comparison of two groups of men (with primary and secondary infertility) undergoing infertility investigation.

Materials and Methods: Semen analyses from consecutive 183 subfertile patients who agreed to participate in the study were assessed from September 2002 to March 2004. We excluded those patients who had undergone radio or chemotherapy, orchiectomy or vasectomy from the study. Mean values of all analyses were used for patients with multiple semen analysis. Sperm concentration and motility were evaluated according to the World Health Organization criteria and sperm morphology according to the Kruger strict criteria. The charts of the patients were reviewed to determine whether the patient had a history of previous fertility or not. Patients were divided into two groups according to the fertility status: group A (primary infertility; n = 118) and group B (secondary infertility; n = 65). Data were analyzed according to the Chi-square and Student’s t test.

Results: The mean age in group A was 37.3 ± 6.3 vs. 38.1 ± 5.9 in group B; p = 0.08. In group A, 51.9% (61 patients) had a normal sperm concentration, 70.3% (83 patients) had normal sperm motility, and 26.3% (31 patients) had a normal sperm morphology. 53.8% of the patients in group B (n=35) had a normal sperm concentration, 75.4% (n=49) had a normal sperm motility, and 32.3% (n=21) had a normal sperm morphology. No significant differences were detected in sperm concentration (21.3 X 10^6/mL vs. 23.1 X 10^6/mL; p = 0.07), motility (45.2% vs. 48.1%; p = 0.08) and morphology (6.1% vs. 6.4%; p = 0.09) between patients in groups A and B.

Conclusion: This study shows that infertility is a couple’s problem, and men with even abnormal semen analysis can impregnate their wife. Physicians should not presume a patient to have a normal semen analysis based on his previous history of initiating a
pregnancy.
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