

Urine Indices before and after Semen Sampling

Soltanghoraee, Haleh (M.D.)¹; Sadri-Ardekani, Hooman (M.D.)^{1,2*}; Sadeghi Tabar, Ali (D.M.T.)³; Akhondi, Mohammad Mehdi (Ph.D.)¹; Chamani-Tabriz, Leili (M.D., M.P.H.)¹; Zeraati, Hojjat (Ph.D.)⁴; Kashi, Tahereh (B.Sc.)¹

1. Reproductive Biotechnology Research Center, Avicenna Research Institute, ACECR, Tehran, Iran

2. Center for Reproductive Medicine, Department of Obstetrics and Gynecology, Academic Medical Center, University of Amsterdam, Amsterdam, the Netherlands

3. Avicenna Infertility Clinic, Avicenna Research Institute, ACECR, Tehran, Iran

4. Department of Epidemiology and Biostatistics, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran

Abstract

Introduction: In fertility clinics and diagnostic laboratories, a great number of male subjects undergo urinary sampling for urine analysis (U/A) after semen sampling. Despite taking thorough medical histories in these centers, questions on intercourses or ejaculations prior to the sampling are occasionally neglected. Due to the noticeable increases in urinary protein upon S/A and the possibilities for U/A parameters distortion, this study was undertaken to compare urinary indices before and after semen sampling.

Materials and Methods: Urine samples were obtained from 220 men attending Avicenna Infertility Clinic in Tehran, Iran, before and after semen sampling and two urinalyses were done for each patient. Eventually, the findings were statistically compared and analyzed.

Results: Biochemical and physical characteristics of urine samples, including color, blood, ascorbic acid, urobilinogen, bilirubin, nitrite, ketone, glucose and specific gravity did not undergo significant changes after semen sampling, while turbidity and protein were increased ($p < 0.001$) and urine pH was decreased but with no statistical significance ($p = 0.46$).

Conclusion: It is recommended to ask about ejaculation or prior intercourses before urine sampling for urinalysis, especially at times when urinary protein is of importance. This will avoid unnecessary, additional diagnostic testing, which in turn will prevent psychological distress and save money and time.

Key Words: Dipstick, Ejaculation, Proteinuria, Semen analysis, Urinalysis.

* **Corresponding Author:** Dr. Hooman Sadri-Ardekani, Reproductive Biotechnology Research Center, Avicenna Research Institute, Shahid Beheshti University, Velenjak, Tehran, Iran. P.O. Box 19615-1177.

E-mail: sadri@avicenna.ac.ir

Received: Aug. 27, 2008; **Accepted:** Feb. 23, 2009