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The importance of the postcoital test

To the Editors: I read with interest the article by Griffith and Grimes (Griffith CS, Grimes DA. The validity of the postcoital test. AM J OBSTET GYNECOL 1990; 162:615-20.) on the validity of the postcoital test. They point out to the reader the problems in interpretation of previous articles in the literature: variation existed in standardization for the interval after intercourse, definition of an abnormal postcoital test, timing in the cycle of the postcoital test, and degree of investigation of other factors that could lead to infertility.

The emphasis of these shortcomings should certainly make the reader at least question some of the previous dogmatic statements that were made about the clinical importance of the postcoital test and should encourage clinicians and researchers to perform prospective randomized investigations to determine whether performance of this test is a waste of time or money.

However, instead of merely highlighting the caveats, the authors proceeded to use the same discordant studies to leave the reader with the impression that the postcoital test has poor validity as a diagnostic test for infertility and therefore to encourage the clinician to abandon the test, rather than to refine the postcoital examination and then assess its clinical importance. They suggest, in fact, that at least $50,000,000 is wasted each year on a test with poor validity.

We previously presented data concerning the importance of the use of follicular maturation studies to be certain of proper timing of the examination and to be sure that poor quality mucus is not related to failure to form a mature follicle (inadequate estrogen effect) or premature luteinization (adverse progesterone effect).[1] We, like Hull et al.,[2] define abnormal as the absence of progressively moving sperm in the mucus 8 to 12 hours after intercourse. In one study of 70 patients whose only apparent infertility problem was a cervical factor, only 2 of 20 patients (10%) conceived when the test was not corrected compared with 37 of 50 patients (74%) in whom at least some sperm with progressive forward motion were noted in the mucus.[3]

One problem with the conclusions from the ethinyl-estradiol-human menopausal gonadotropin study was that even though mature follicles were demonstrated at the time of the postcoital tests, the possibility existed that hyperstimulation might have been responsible for the pregnancy rather than improvement of the sperm-mucus interaction. Recently, however, we presented data at the Seventh World Congress on Human Reproduction in Helsinki, Finland, which were based on nonstimulated cycles with 0 moving sperm. After intercourse there was only a 3.9% pregnancy rate per cycle compared with 21.2% with properly timed intrauterine insemination.

I write this letter to caution the reader not to abandon the postcoital test but to strive to be careful about potential pitfalls in misinterpretation and to be open-minded about the importance of the test. Until the authors or some other researchers present clear prospective data that negate the clinical importance of this test, I believe that conclusions about the invalidity of the test, which are based on other studies that lack standardization, are in themselves invalid.

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