Routine postcoital testing is unnecessary

‘Routine postcoital testing is unnecessary’, is an official conclusion and a recent policy change of the Practice Committee of the American Society for Reproductive Medicine (2000). European Society of Human Reproduction and Embryology (ESHRE) never recommended the routine test and even in the last postcoital test (PCT) bastion, the Netherlands, another university hospital has abandoned the PCT as part of the routine investigation of the subfertile couple.

Glazener et al. (2000) challenged the existing substantial evidence (Griffith and Grimes, 1990; Oei et al., 1995) partly based on the powerful design of a randomised controlled trial (Oei et al., 1998), by re-analysing their cohort data published in 1987 (Glazener et al., 1987a). In their recent paper, 207 couples, for whom complete data were available, were studied, free of ‘noise’ as they stated. The original cohort, however, consisted of 318 couples, suggesting that the original paper was performed with incomplete data? The reason for exclusion of 35% of the couples is undisclosed. Absent or non-motile spermatozoa in mucus of good condition was used by us as the definition of a negative or abnormal postcoital test, while Glazener et al. (2000) considered the test negative ‘if less than one forward-progressing spermatozoon in most (at least five) high power field (HPF)’ were found. The definition is unclear as to whether they observed forward-progressing spermatozoons in 2, 3 or 4 HPF. In this respect, the statement in their 1987
paper that the likelihood of conception is greater when the couples with a poor-positive PCT were excluded, is alarming.

Their advice to recommend IUI in case of negative PCT is remarkable, while the same group concluded from data of their randomised controlled trial (Glazener et al., 1987b) that IUI ‘in couples whose infertility was due to failure of sperm mucus penetration, as defined by negative postcoital tests, appeared to be of no benefit’. Substantial evidence since then has still not been published (Oei et al., 1999). To advocate ICSI as an effective treatment for couples with <3 years infertility and a negative PCT lacks any scientific base.

Balasch (2000), amongst others, concluded, that whether the PCT is normal or abnormal, the treatment nowadays is the same.

Tribute
The announcement of the demise of Professor Michael Hull reached us when we read the publication of Glazener et al. in the September 2000 issue of Human Reproduction. He was an excellent clinical researcher with outstanding integrity and function in their latest guidelines for Secondary and Tertiary Gynaecologists (1998) failed to recommend a test of sperm function. The PCT is normal or abnormal, the treatment nowadays is we feel that a reliable diagnosis of sperm dysfunction remains.

We feel that much of the controversy that surrounds the postcoital test (PCT) is due to confusion regarding its purpose between testing male rather than female infertility. We advocate the PCT as an investigation of sperm dysfunction whereas the ASRM Practice Committee considered the evaluation of the infertile female to detect cervical factors. However it is worth noting that their recommendation continues ‘The test may be reserved for patients in whom results will clearly influence the treatment strategy’. We contend that this is true of couples with <3 years infertility. We accept that the PCT result does not affect outcome in couples with more prolonged infertility and it might be unnecessary to test these patients, although we feel that a reliable diagnosis of sperm dysfunction remains valuable.

Standard semen analysis according to the World Health Organization (WHO) protocol has little prognostic power for conception unless the results are very poor. A better index of male fertility is needed. Like the bodies cited in the letter from Oei et al., the Royal College of Obstetricians and Gynaecologists (1998) failed to recommend a test of sperm function in their latest guidelines for Secondary and Tertiary practice. However, this was on the grounds that these are poorly standardized and that there is insufficient evidence of their efficacy rather than the absence of a need for them. We regret that no widely accepted test of sperm function is available to provide a reasonably accurate prognosis for conception in couples with sperm dysfunction. We have demonstrated that the PCT can achieve this but it requires great commitment to ensure proper timing of intercourse in the pre-ovulatory phase of the cycle and that valid negative tests are repeated before they are accepted. As our recent paper demonstrates, the test can only demonstrate its full prognostic potential when female factors are fully controlled.

The lack of discriminant power of the PCT in the randomized controlled trial conducted by Oei et al. may be explained because patients proceeded to assisted reproductive treatments irrespective of the PCT result (Oei et al., 1998): this explains the high conception rates in couples with a negative PCT, as they received effective treatment. If the test is not used to alter the management of the patients, it is hardly surprising that it has no effect on outcome.

Methodological points
The Materials and methods section of our paper clearly states that the present analysis was restricted to women with at least a year’s infertility and with complete data. To increase rigour, we excluded couples who had a PCT result but no semen analysis (or vice versa), who were used for one analysis but not the other in the original paper (Glazener et al., 1987a). Furthermore, the results for couples with a poor positive PCT were intermediate between the negative and positive groups (not worse as stated in Oei’s letter), due in part to inclusion of women who conceived before full diagnostic tests had been completed. According to the criteria of Oei et al. these couples were reclassified as negative if the poor-positive result was confirmed in a second cycle in good mucus, and those with only one result were excluded (Oei et al., 1995). This explains

References
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Dear Sir,
We would like to thank Oei et al. for their interesting comments on our recent paper (Glazener et al., 2000) and their generous tribute to Professor M.G.R. Hull. We would like to make the following points in reply.