

Letters to the Editor

Effect of pentoxifylline on mouse embryos

Dear Sir,

We were very interested in the paper by Tournaye *et al.* (1993a) detailing the effects of pentoxifylline on mouse oocytes and embryos. Given its known effect of phosphodiesterase inhibition, it was to be expected that pentoxifylline might have detrimental effects on oocytes and embryos. For this reason, our protocols described the necessity for washing out pentoxifylline from sperm preparations prior to oocyte insemination. We still believe very strongly in this, as detailed in a current review paper (Yovich, 1993).

We would therefore have recommended that Tournaye's abstract include a comment about the necessity for washing out pentoxifylline in human assisted reproduction procedures. We wonder whether the negative findings of Tournaye's group in their earlier publication concerning the use of pentoxifylline with couples with previous failed fertilizations (Tournaye *et al.*, 1993b) could be associated with the sperm preparation protocol, particularly its inclusion in the washing step, as well as during the 45-min incubation period. A shorter exposure time (30 min) of the harvested motile sperm fraction to 3.6 mM pentoxifylline and its removal with a final wash, as described in the revised protocol by Yovich *et al.* (1990), would likely have improved the outcome for those couples.

References

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Dear Sir,

We appreciate Dr Yovich's interest in our recent paper dealing with the effects of pentoxifylline on the development of mouse embryos (Tournaye *et al.*, 1993a). As already forwarded in this paper, our current findings in the mouse stress the importance of washing-out pentoxifylline if used in human assisted

reproduction. Washing out pentoxifylline will only expose the early conceptus to micromolar concentrations which in this study and in a subsequent study (Tournaye *et al.*, 1993b) do not seem to harm embryonic development. In the protocol as described in our earlier publication where pentoxifylline was used in IVF in couples with previous failure of fertilization (Tournaye *et al.*, 1993c), the drug was washed out carefully in pentoxifylline-free medium.

Furthermore, we wonder if our negative findings in that study may be explained by exposing the spermatozoa only 15 min longer to pentoxifylline than in the protocol described by Yovich *et al.* (1990). As already mentioned earlier (Tournaye *et al.*, 1993d) we currently apply a revised protocol according to Yovich *et al.* (1990), however, our preliminary results do not show an improvement in the fertilization rate in an auto-controlled set-up.

References

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Treatments of male infertility

Dear Sir,

I read the review and meta-analysis of treatments of male infertility (O'Donovan *et al.*, 1993) in August's issue with great interest, but was intrigued by their statement that success in the first phase of cross-over designs exaggerates positive effects, 'with the result that a spurious statistically significant result may be found'. To test this contention I have considered two 'typical' situations.