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AUTHOR REPLY

Re: Is number of chiasmata an etiological factor of male infertility?

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We would like to thank Kurpisz and Olszewska¹ for their commentary on our article² and we welcome the opportunity to discuss some of the issues addressed by our colleagues.

Meiotic studies are considered to have diagnostic value in cases of infertility of unknown aetiology.³ We would like to remark that its application in the context of our article has been done in compliance with the existing legal framework. Concerning testicular biopsies from fertile individuals (the control population claimed by the authors) is a goal difficult to reach as it requires medical intervention without a diagnostic purpose.

As with any study, our study has limitations, and some are inherent to the biological samples affordable. However, the robustness of the results is supported by the statistical analysis based on Poisson regression models and designed to analyze, in an objective manner, chiasmata counts in relation to the preferential affectation of certain

chromosomes, to the seminal parameters and to the karyotype. These statistical models correct limitations in the treatment of the data as under-dispersion and weighting. We are disappointed that the authors did not reflect our results in their interpretation of some specific figures. For instance, the mean values of chiasmata counts deduced from Table 2 are not weighted by the number of individuals.² Moreover, the authors grouped together results that have been obtained following differently analytical approaches (as indicated in Table 2).² Finally we would like to remark that 481 metaphases were informative in terms of chiasmata count, although in 14% of them some chromosomal units were not evaluable.

We are grateful for the interest shown in our manuscript. We are also intrigued by some of the issues opened by our research, and we are confident we will make progress on them in the next future.

REFERENCES

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