Reply: Maternal smoking during pregnancy and age at menarche of premenopausal and postmenopausal daughters

Sir,
We would like to thank Fukuda et al. for their interest in our article (Ernst et al., 2012) and appreciate their valuable work adding some interesting perspectives to the subject.

Fukuda et al. observed a crude reduction in age of menarche of ≈4 months among premenopausal daughters exposed to maternal cigarette smoking during pregnancy compared with unexposed daughters. The finding is consistent with the crude differences of 4 months (non- versus low exposed) and 6 months (non versus high exposed) found in our study despite the differences in study design, which is reassuring.

Fukuda et al. included a larger study population than ours (2046 premenopausal daughters versus 362 premenopausal daughters) but a lower proportion of exposed daughters (10 versus 38%). More importantly, we used prospectively collected information on maternal cigarette smoking during pregnancy instead of retrospectively collected data, as in the study by Fukuda et al., thereby lowering the risk of recall bias in our study. Fukuda et al. did not observe any association between in utero exposure to cigarette smoking and age of menarche among postmenopausal daughters which may—at least partly—be attributable to the long recall time (31–67 years), resulting in non-differential misclassification of the exposure and outcome leading to an underestimation of the association.

In order to further examine the association future studies with prospectively collected information on both maternal smoking during pregnancy and age of menarche in daughters as well as taking maternal age of menarche into consideration because of its strong genetic features may be the next step.

Reference


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doi:10.1093/humrep/des420
Advanced Access publication on December 6, 2012