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Associations of maternal exposure to organophosphate and pyrethroid insecticides and the herbicide 2,4-D with birth outcomes and anogenital distance at 3 months in the Odense Child Cohort

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Highlights

- Birth outcomes or AGD were not consistently related to pesticide exposure level
- Exposure to 3-PBA was associated to smaller abdominal circumference in females
- Pyrethroids and organophosphates tended to be dose-related to longer AGD in females.
- Males exposed to 2,4-D in the second compared to the first tertile had a shorter AGD

Abstract

In Odense Child Cohort (OCC), concentrations of the pesticide metabolites 3-phenoxybenzoic acid (3-PBA), 3,5,6-trichloro-2-pyridinol (TCPY), 2,4-Dichlorophenoxyacetic acid (2,4-D) and dialkyl phosphates (DAPs) were measured in urine samples collected in gestational week 28 in up to 858 women. Gestational length, birth weight, head and abdominal circumference were obtained from birth records and anogenital distance (AGD) was measured at age three month. We did not find consistent dose-related associations between pesticide metabolite concentrations

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