

41

OCCUPATIONAL CARRYING OF LOADS DURING PREGNANCY AND THE RISK OF FETAL LOSS

Mette Juhl,¹ Per Kragh Andersen,¹ Susanne Wulff Svendsen,² Jens Peter Bonde,¹ Anne-Marie Nybo Andersen¹ ¹*University of Copenhagen, Copenhagen, Denmark;* ²*Regional Hospital, Herning, Denmark*

10.1136/oemed-2011-100382.41

Objectives Lifting heavy loads is generally discouraged in pregnancy. Older studies, mainly based on retrospectively collected data, have suggested an increased risk of early fetal loss among women with occupational heavy lifting; studies on late fetal loss are almost absent. We examined the association between occupational heavy lifting during pregnancy and fetal loss throughout pregnancy.

Methods We used self-reported information on occupational lifting from 72 280 singleton pregnancies included in the Danish National Birth Cohort from 1996 to 2002, where the woman had been working while pregnant and participated in an interview in early/mid pregnancy (n=70 224) or after a fetal loss (n=2056). We used Cox regression models for analysis.

Results We found an increased risk of fetal loss up to gestational week 12 among women with heavy lifting at work, following an exposure-response pattern including statistically significant trend tests for both the cumulated load lifted/day and lifting frequency. The fetal loss hazard ratio for lifting >1000 kg/day was 1.77 (95% CI 1.12, 2.79) compared with non-lifters. No trend was observed for later fetal loss. Findings were not corroborated in analyses of the subset of women with prospectively collected data on occupational lifting. There was no clear interaction pattern, when analysed as a combined measure of the weight lifted and the frequency of lifts.

Conclusions Our data suggest an increased risk of fetal loss for women with occupational heavy lifting in pregnancy. Should these findings reflect causal links, this would entail a preventive potential in antenatal care.