

Exposure to environmental toxins in males seeking infertility treatment: a case-controlled study

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This case-control study explored the role of environmental toxins in male infertility in patients attending an assisted reproduction clinic in south-eastern Spain. Exposures were compared by questionnaire for 30 infertile oligoasthenoteratozoospermic males and 31 normospermic controls residing in the area. Odds ratios and 95% confidence intervals (CI) were used to estimate differences in lifestyle and chemical occupational exposures. More than two-thirds of the patients (23/30), compared with less than one-third of controls (10/31), had been exposed occupationally to at least one toxin or pollutant (OR = 6.9; 95% CI: 2.2–21.4) and were also more exposed to them currently (OR = 5.2; 95% CI: 1.6–17.2). Exposure to glues, solvents or silicones (OR = 22.9; 95% CI: 2.8–190.9), metals (OR = 8.8; 95% CI: 1.4–54.2) and physical agents (OR = 7.3; 95% CI: 1.4–36.7) in the past, as well as current exposure to glues, solvents or silicones (OR = 10.4; 95% CI: 2.6–42.5) and physical agents (OR = 4.7; 95% CI: 1.1–19.2), were significantly higher in patients than in controls. Average duration of exposure was also significantly higher in patients ($P < 0.001$). This study suggests that male infertility in patients attending infertility clinics may be largely the result of occupational exposure.

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