

Environmental factors and Parkinson's disease: A case-control study in Belgrade, Serbia

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Objective: A case-control study was performed in Belgrade in order to investigate the association between Parkinson's disease (PD) and some environmental factors. **Methods:** During the period 2001–2005, 110 new PD cases and 220 hospital controls were interviewed. Cases and controls were matched by sex, age (± 2 years), and place of residence (urban/rural). **Results:** According to multivariate conditional logistic regression analysis, PD was positively associated with exposure to insecticides (odds ratio (OR) 3.22, 95% confidence interval (95% CI) 1.32–7.87), dyes (OR 25.33; 95% CI, 2.89–222.0), and naphtha and its derivatives (OR 9.53; 95% CI, 1.04–86.96), and with gardening (OR 5.51; 95% CI, 3.04–10.01), well water drinking (OR 2.62; 95% CI, 1.40–4.90), and spring water drinking (OR 2.19; 95% CI, 1.15–4.16). Negative association was found for service-sector working (OR 0.15; 95% CI, 0.04–0.59). The results obtained did not change after adjustment for smoking. **Conclusion:** The findings of the present study support the role of environmental factors in the occurrence of PD.