INDUCTION OF NITRIC OXIDE SYNTHASE BY CHLORINATED PESTICIDES (p,p'-DDT, CHLORDANE, ENDOSULFAN) IN RAT LIVER

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SUMMARY

The aim of this study is to investigate the effect of certain polychlorinated pesticides on the induction of rat liver Ca^{2+}-independant nitric oxide synthase (NOS) and compare it with the effect of bacterial lipopolysaccharide. Our results show that endosulfan and *p, p'*-DDT treatment significantly increases the NOS activity while no significant induction by any route of administration was observed in the case of chlordane. Our results show therefore that a wide variety of chlorinated pesticides, which are considered as hepatic tumor promotors, can stimulate the expression of NO synthase *in vivo*.

Key words: nitric oxide synthase, induction, polychlorinated pesticides, hepatotoxicity

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