

**EPR and DSC study of the effects of propofol and nitrosopropofol on DMPC multilamellar liposomes**

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The mechanisms of reaction of propofol with nitrosoglutathione lead to the formation of an active species which was identified as 2,6-diisopropyl-4-nitrosophenol. In the present work, we discuss the interaction of propofol and 2,6-diisopropyl-4-nitrosophenol with dimyristoylphosphatidylcholine and egg yolk phosphatidylcholine multilamellar liposomes using differential scanning calorimetry and spin labelling techniques. The thermotropic profiles show that these molecules affect the temperature and the cooperativity of the gel to fluid state transition of the liposomes differently: the effects of 2,6-diisopropylphenol on the lipid organisation are quite similar to phenol and coherently interpretable in terms of the disorder produced in the membrane by a bulky group; 2,6-diisopropyl-4-nitrosophenol is a stronger perturbing agent, and ESR spectra suggest that this is due to a relative accumulation of the molecule into the interfacial region of the bilayer.