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Nitric oxide and the action of ethanol on the potential difference across the stomach wall Anna Dziaduś-Sokołowska, Ryszard Bilski, Andrzej Szlachcic, Janusz Mroczka, Józef Michalski, Jacek Politański

Potential difference across the stomach wall (PD) is determined by the gastric electrolyte mucosal barrier. The decrease in the PD by "barrier breakers", e.g. aspirin, ethanol, cholic acids is a sensitive index of the mucosal damage. We compared in anaesthetized Wistar rats the effect of two exogenous nitric oxide (NO) donors: glyceryl trinitrate (GTN) and molsidomine (MOL) on the PD and the injuring action of ethanol on the mucosal barrier. GTN and MOL given intragastrically alone did not significantly change the PD and did not damage the barrier, but both of the two NO donors reduce the PD drop evoked by ethanol and diminish the damaging action of ethanol on the gastric mucosa.