

## N-Acetylcysteine abolishes the bromoethylamine-induced choline incorporation into renal papillary tissue

Thielemann, L. E.

Rodrigo, R. A.

Oberhauser, E. W.

Rosenblut, G.

Videla, L. A.

The role of regenerative processes in the protective effect of N-acetylcysteine (NAC) against bromoethylamine-induced renal papillary necrosis was assessed in rats given bromoethylamine (BEA) (1.2 mmol/kg), N-acetylcysteine (6 mmol/kg), or N-acetylcysteine plus BEA. Renal papillary slices were dissected after 15 hours of treatment, and <sup>14</sup>C-choline incorporation into total phospholipid, lysophosphatidylcholine, sphingomyelin, and phosphatidylcholine was measured. Bromoethylamine elicited an increase in the incorporation of <sup>14</sup>C-choline into choline-containing phospholipid, an effect that was abolished when N-acetylcysteine was administered prior to bromoethylamine. These studies indicate that the defensive mechanism of N-acetylcysteine against bromoethylamine-induced renal papillary necrosis is not related to regenerative processes and that N-acetylcysteine abolishes the bromoethylamine-induced choline incorporation into papillary phospholipid. © 1996 John Wiley & Sons, Inc. Copyright