

effects are not seen when treatment with the combination is delayed until the onset of symptoms.

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### Ethanolamine and anaphylactic shock

SIR,—As is well known, mepyramine and other antihistamines protect guinea-pigs against anaphylactic shock. Smith (1961) has reported that ethanolamine alone has no protective effect but potentiates the protective effect of mepyramine. In addition, he made experiments with guinea-pig ileum and suggested that ethanolamine inhibits the SRS-A liberation in anaphylaxis. Because of the fundamental interest of his observations we have repeated the protection experiments with the same method (Herxheimer, 1952), giving mepyramine and ethanolamine intramuscularly before the animals were shocked. The results were calculated according to the method of Armitage, Herxheimer & Rosa (1952) which differs somewhat from the calculation of Smith in the mathematical expression of the protection but leads to comparable conclusions. The Table shows that the combination of ethanolamine and mepyramine has no greater protective effect than mepyramine alone. It even appears that the combination of 1.0 and 0.05 mg mepyramine with 20 mg of ethanolamine protected less than mepyramine alone. The animals were fed with pellet food containing additional ascorbic acid supplemented with hay.

We therefore are unable to confirm the results reported by Smith.

TABLE 1. EFFECTS OF ETHANOLAMINE AND MEPRAMINE IN PROTECTING GUINEA-PIGS FROM ANAPHYLACTIC SHOCK

Ethanolamine 20 mg/kg Mepyramine 0.01 mg/kg $\bar{x}$ = 30 n = 14 s.e. = 4.9	← P > 0.35 →	Mepyramine 0.01 mg/kg $\bar{x}$ = 32.5 n = 44 s.e. = 4.5
Ethanolamine 20 mg/kg Mepyramine 0.05 mg/kg $\bar{x}$ = 34.2 n = 42 s.e. = 4.2	← P < 0.001 →	Mepyramine 0.05 mg/kg $\bar{x}$ = 54.9 n = 35 s.e. = 2.9
Ethanolamine 20 mg/kg Mepyramine 1.0 mg/kg $\bar{x}$ = 68 n = 9 s.e. = 3.9	← P < 0.01 →	Mepyramine 1.0 mg/kg $\bar{x}$ = 79.5 n = 24 s.e. = 2.4

$\bar{x}$  = mean antianaphylactic protection in % (ranging from 0-100%)

n = number of experiments

s.e. = standard error

P = level of significance of difference between two results

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