Reserpine was dissolved in 20% ascorbic acid solution making the solution up to 10 mg/ml as required. Injections were made intraperitoneally. Dogs were given 0.5 mg/kg on two successive days, the dog being killed on the third day. Cats were given 2.5-5.0 mg/kg on two successive days, and rabbits were given 3 mg/kg on two successive days.

Fig. 1. Upper record is that of the nictitating membrane; lower record that of blood pressure in the spinal preparation. (a) Normal cat; injection of 10 μg noradrenaline produced a small rise of blood pressure; 4 mg tyramine hydrochloride produced a large rise of blood pressure and large contraction of the nictitating membrane. (b) Cat treated with reserpine. Note that the effects were reversed; 4 mg tyramine had a very slight effect on the blood pressure and none on the nictitating membrane; 10 μg noradrenaline had a large effect on the blood pressure. (c) Same as (b); after the intravenous infusion of 0.12 mg noradrenaline, the effect of 4 mg tyramine on the blood pressure was much greater than in (b).

**RESULTS**

**Action of tyramine**

Fig. 1 shows records taken from experiments in two spinal cats, the one a normal cat, and the second a cat treated with reserpine. In Fig. 1a the injection of 10 μg noradrenaline into the normal cat caused a small rise of blood pressure, whereas the injection of 4 mg tyramine hydrochloride caused a large rise of blood pressure and a large contraction of the nictitating membrane. In Fig. 1b the same injections were made into a cat treated with reserpine. The effect of 4 mg tyramine hydrochloride was very small and there was no contraction of the nictitating membrane, while the effect of 10 μg noradrenaline was very much larger than in the normal cat. A solution of demonstration for the first time that sympathomimetic amines, such as tyramine, raised blood pressure indirectly by releasing norepinephrine from stores in the sympathetic nerve terminals.