

those described here. It is probable that their results can be explained on the basis that imipramine, in binding to the cell membrane, prevents the access to the interior of the cell of compounds which cause aggregation, as well as inhibiting the release of ADP from the platelets as they suggested.

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β -Blocking agents on the pupil of the frog

SIR,—It is believed that the sympathetic effect on the dilator pupillae is mediated via α -receptors (Beaver & Riker, 1962; Ahlquist, 1966). The intravenous administration of α -blocking agents like phenoxybenzamine to dogs or rabbits, followed by an intraocular injection of (–)-adrenaline, (–)-noradrenaline and (–)-isoprenaline inhibits mydriasis. Pretreatment with a β -blocking agent like dichloroisoprenaline in a similar way does not inhibit mydriasis (Bennett, Reinke & others, 1961). When the effect of applied catecholamines is observed on the isolated eye of the frog prepared according to Ehrmann (1905), evidence of the existence for β -receptors is uncovered.

One eye is placed in an isotonic saline solution and serves as a control. The other is placed in isotonic saline solution in which the drug has been dissolved. Propranolol in a concentration of 2 to 5×10^{-5} provokes miosis within 3 hr which 8-12 hr later develops into a complete closure of the pupil; while isoprenaline provokes mydriasis in a concentration of 0.5 to 1×10^{-5} . This latter action is partially inhibited in eyes which have been placed in the propranolol solution.

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