
In previous experiments on the isolated gut of the guinea pig and the rabbit, it was demonstrated that certain sulfur containing compounds such as sodium sulfathiazole, sodium sulfanerazine and sulfanilamide as well as thiamine hydrochloride and thiazole inhibit the contraction of smooth muscles induced by stimulation of the sympathetic synapses with nicotine. The action is reversible and is not caused by a preceding paralysis of the ganglia. In consideration of the manifold influences of nicotine on the entire vegetative nervous apparatus, it appeared important to investigate whether such inhibitory actions by the above named sulfur containing compounds could also be produced in vivo at the vasomotor synapses of the thoracic and abdominal sympathetic nervous system. . . . Such an inhibition of the blood pressure raising effect of nicotine would be remarkable both from a theoretical and practical standpoint. It would open new ways for the more intimate pharmacological analysis of this important nicotine action and also offer a new method for the prevention of vasopressor effects as a consequence of ganglionic stimulation. . . .

It seemed indicated to investigate whether para-aminobenzoic acid which completely reverses the bacteriostatic action of many of the sulfonamides is able to inhibit the thiazole effect upon nicotine or even to abolish an existent blocking effect by subsequent application. For this purpose the sodium salt of para-aminobenzoic acid was injected intravenously before and after application into cats in amounts of 40–60 mgm. The experiments proved that para-aminobenzoic acid was unable to produce a blockade of ganglia to nicotine and was also unable to abolish an existing blocking effect to nicotine caused by thiazole containing compounds. It can be deduced from this that the inhibition of the bacteriostatic effect of sulfonamides, one of the longest known competitive receptor effects on bacterial cells has no analogy in nervous cells . . . .

The intravenous infusion of sodium sulfathiazole (60–150 mgm. per kgm. body weight) or of thiamine hydrochloride (about 3–10 mgm. per kgm. body weight), prevents the rise in blood pressure induced by the intravenous injection of 0.1–1.0 mgm. nicotine base in untreated cats. This blocking of the nicotine effect is not caused by a paralysis of the synapses; it lasts 10 minutes to 1 hour or more and is dependent directly in its duration and intensity upon the amount of sulfathiazole or thiamine infused and inversely upon the test dose of nicotine used." 12 references.

J. C. M. C.


The management of anesthesia for surgical procedures on the bowel must insure the maximal degree of safety for the patient. The duties of the anesthesiologist in his management of anesthesia include the responsibility for preoperative medication, the choice and administration of the anesthetic, the supervision of and responsibility for supportive therapy prior to and during the operation, and the treatment of certain postoperative complications. . . . The average dose of preoperative medication may be summed up as light to moderate medication for