Effect of dopamine on human gastric and pancreatic secretion

Valenzuela, Jorge E.

Defilippi, Carlos

Diaz, Gabriela

Navia, Erika

Merino, Yolanda

It has previously been shown that dopamine stimulates pancreatic exocine secretion and inhibits acid secretion in the dog. In this study, the authors have investigated the effect of dopamine on human gastric and pancreatic secretions. In 6 subjects, dopamine produced a dose-dependent inhibition of pentagastrin-stimulated acid secretion, an effect that was suppressed when the subjects received haloperidol. In 6 other subjects, dopamine infusion did not modify basal pancreatic secretion, and dopamine inhibited pancreatic enzyme secretion during secretin-cholecystokinin infusion. Dopamine also caused a rise in plasma glucagon and insulin. The effects on pancreatic enzyme secretion and plasma glucagon were not antagonized by haloperidol. The results suggest that dopamine is inhibitory for human gastric secretion. The authors did not observe a stimulatory effect of dopamine on human pancreatic exocrine secretion as has been observed in dogs. © 1977.