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Mechanism of Secretin Diuresis.

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Owen and Ivy have shown that the intravenous injection of concentrated vasodilatin-free secretin preparations into dogs results in a typical moderate diuresis. Certain characteristics of the diuresis led us to suspect that it was related to, and probably dependent upon the secretory stimulation of pancreatic juice and bile. The following experiments give evidence that this is the case. Following pancreatectomy and ligation of the common bile duct, previously active preparations are without effect on the rate of urine flow. Secretin preparations cause no diuresis if the bile and pancreatic juice resulting from their injection are diverted from the intestine by cannulae. Reintroduction of the collected bile and pancreatic juice into the intestine is followed by the typical diuresis. Diuresis in the intact dog is therefore dependent on the secretion of pancreatic juice and bile, and the entrance of these secretions into the intestine where they may be reabsorbed. It may be noted that in the experiments in which Mellanby¹ reported that secretin had no diuretic effect, the pancreatic juice and bile were simultaneously collected by means of cannulae so that they could not enter the intestine.

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Physiological Effects of Denervating the Carotid Sinus in Dogs.

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The carotid sinus is the seat of reflexes controlling heart rate, blood pressure and respiration. This fact was first demonstrated in acute experiments by H. E. Hering,¹ and has been amply verified

¹ Mellanby, J., *J. Physiol.*, 1929, **66**, 1.

¹ Hering, H. E., *The Carotid Sinus Reflex on Heart and Blood Vessels*, 1927, Verlag von Theodor Steinkopff (Dresden and Leipzig).