

“Renin-Angiotensin System in the Pancreas: From the Basic Research to the Bedside” Preface

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The circulating renin-angiotensin system (RAS) has multiple and diverse actions, most of which relate, either directly or indirectly, to the endocrine control of blood pressure, fluid and electrolyte homeostasis. In addition to its properties as a potent vasoconstrictor and primary stimulator of aldosterone secretion, the RAS has long been believed to play an important role in regulating different specific responses in many target tissues. Recently, a shift from an endocrine role to an autocrine and/or paracrine role has been hypothesized for the RAS in its mediation of individual tissue functions. The notion for the existence of a local RAS in various tissues such as the brain, the heart, the kidney and the gonads has led to the proposition that a paracrine and/or autocrine RAS may function independently, in whole or in part, of the circulating RAS in meeting individual tissue needs.

Our recent research on the existence of a local RAS in the pancreas and its potential role in the exocrine and/or endocrine functions of the pancreas are of particular interests to the basic and clinical sciences. Nevertheless, so little is currently known about the local RAS in the pancreas that there are plenty of opportunities for significant discoveries to be made in the field of the pancreatic RAS. It is therefore timely and appropriate to

organize the present “virtual” round table on the RAS in the pancreas. The primary mission is to promote the exchange and rapid dissemination of firsthand scientific and medical information among our basic and clinical scientists who are presently and actively participating in the research of the RAS in the pancreas.

In view of this fact, the clinical relevance of the pancreatic RAS may be important for the physiological and pathophysiological aspects of the pancreas. An alternative approach may be provided by future strategies aimed at determining the level of the pancreatic RAS. The potential value of that would be to understand the mechanism involved in some pancreatic diseases including the inflammatory disease, diabetes mellitus, cystic fibrosis and cancer. The collection of articles reported in this special issue of *JOP - Journal of the Pancreas* - represents our contribution to colleagues who are interested in pancreatology and in the basic and clinical research of the RAS.

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