The Entero-Insular Axis

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Contents

Foreword ........................ IX

The Concept of the Gastro-Enteropancreatic (GEP) Neuroendocrine System

Larsson, L.-I. (Aarhus): New Aspects on the Neural, Paracrine and Endocrine Regulation of Islet Function ................................................................. 14
Schauer, P. (Göttingen): Somatostatin - Endocrine or Paracrine Substance? .............. 52

Recent Aspects of Pancreatic Hormones

Schwartz. T.W. (Aarhus): Enteroinsular Axis for Pancreatic-Polypeptide ....... 82
Contents

Gastrointestinal Hormones and Insulin Secretion-
the Incretin Concept Updated

Holst, J.J.; Jensen, S.L.; Schaifalitzky de Muckadell, O.B., and Fahrenkrug, J. (Copenhagen): Secretion and Vasoactive Intestinal Polypeptide in the Control of the Endocrine Pancreas ........................................................................ 119
Cataland, S. and O’Dorisio, T. M. (Columbus, Ohio Pathology of Gastric Inhibitory Polypeptide .......................................................... 145

Effects of Experimental or Therapeutic Malassimilation on Islet Function

Frerichs, H.; Ebert, R., and Creutzfeldt, W. (Göttingen): Role of the Enteroinsular Axis in Obesity ................. 181
Ebert, R. and Creutzfeldt, W (Göttingen): Decreased GIP Secretion through Impairment of Absorption ......................... 192
Jenkins, D. J. A. (Oxford/London): Influence of Fibre and Guar-Supplemented Food on Insulin Secretion and Glucose Tolerance ........................................... 218
Schöffling, K.; Hillebrand, I., and Berchtold, P. (Frankfurt/Düsseldorf/Wuppertal): Treatment of Diabetes mellitus with the Glycoside Hydrolase Inhibitor Acarbose (BAY g 5421) ........................................ 248
Track, N. S. (Toronto Gastrointestinal Hormones during Total Parenteral Nutrition. 258
Gries, F.A.; Griineklee, D., and Drost, H. (Dsseldorf): On the Effects of Glucosidase Inhibitors in Diabetes mellitus .................................................. 265
Willms, B.; Sachse, G., and Unger, H. (Bad Lauterberg im Harz): Treatment of Diabetes with a Glycosidehydrolase Inhibitor (Acarbose, BAY g 5421) ................. 276

Contents VII

Poster-Session
Abstracts

Alam, M.J. and Buchanan, K. D. (Belfast): Establishment of a Sensitive Radioimmunoassay for Gastric Inhibitory Polypeptide (GIP) Revealing Hypogipaemia in Diabetes mellitus .................................................. 282
O’Hare, M.M.T.; Andrews, W.J.; Henry, R.W., and Buchanan, K.D. (Belfast): Development of an Assay for Pancreatic Peptide and an Assessment of Its Role in Eating and Starvation in Human Obesity ......................... 283
McKibben, B.M.; Kennedy, A.L.; O’Hare, M.M.T., and Buchanan, K.D. (Belfast): Pancreatic Peptide - The Most Antigenic of the Hormonal Contaminants in Insulin Preparations .................................................. 283
Andrews, W.J.; Henry, R. W.; O’Hare, M.M.T.; Buchanan, K.D., and Cornell, A. (Belfast/New Castle upon Tyne): Heavy Exercise, Metabolism and Gastroenteropancreatic (GEP) Hormones in Obesity .................................. 286
  Lack of Stimulation of Insulin Secretion by GIP during Initial Treatment in Insulin-Dependent Diabetics .................................. 286
Buchanan, K.D.; Redmond, A.O.B.; Alam, M.J., and O’Hare, M.M. T. (Belfast): A Possible Role for Gastric Inhibitory Polypeptide in the Diminished Insulin Secretion in Cystic Fibrosis .................................. 287
Schafmayer, A.; Brger, H.W.; Coelle, E.F., and Becker, H.D. (Gttingen): GIP, Insulin and Blood Glucose after Resecting and Nonresecting Procedures of the Stomach .................................................. 288
McLoughlin, J.C.; Buchanan, K.D., and Alam, M.J. (Belfast): Benefit of a Glycoside
Hydrolase Inhibitor (BAY g 5421) in the Dumping Syndrome 289
Hillebrand, I.; Boehme, K.; Frank, G.; Fink, H., and Berchtold, P. (Wuppertal): Effects of the Glycoside Hydrolase Inhibitor Acarbose (BAY g 5421) on Postprandial Blood Glucose, Serum Insulin and Triglyceride Levels in Man. 290
Bber, V.: Influence of Acarbose (BAY g 5421) on the Response of Blood Glucose and Serum Insulin Levels to an Oral Sucrose Load after an 8-Week Double-Blind Crossover Treatment. 291
Goto, Y.; Homma, Y., and Irie, N. (Tokyo Treatment of the Maturity-Onset Diabetes mellitus with a Glycosidehydrolase Inhibitor (BAY g 5421). 291
Ishikawa, T.; Suzuki, N.; Nakamura, H., and Nagano, M(Tokyo Effect of BAY g 5421 (a-Glucosidase Inhibitor) on Fat and Carbohydrate Metabolism. 292
Akazawa, Y.; Koide, M., and Oishi, M. (Kyoto Endocrine Pancreatic Function and Contents VIII

Hemoglobin A 1c in Adult-Onset Diabetics Before and After Long-Term Administration of BAY g 5421. 292
Foisch, U. R.; Lembcke, B.; Caspary, W. F.; Ebert, R., and Creutzfeldt, W. (Göttingen): Influence of Neomycin on Postprandial Metabolic Changes and Side Effects of an a-Glucosidehydrolase Inhibitor (Bay g 5421) II. Effects on Sucrose Tolerance, Serum IRI and GIP. 295
Fussganger, R.D; Filipponi, P.; Wojcikowski, c., and Maier, V. (Ulm): Isolated Perfused Rat Pancrease and Lejunum, a New Model to Study 'Incretin': BAY g 5421 an Effective Inhibitor of Sucrose-Induced Secretion of Enteral Insulinogenic Activity and Gut GLI. 296
Taniguchi, H.; Seki, M., andBaba, S. (Kobe): Low Insulin Responsiveness Due to Enhanced Adrenergic Mechanism in Newborn Rat Islets. 298
Foreword

On the occasion of the 10th Congress of the International Diabetes Federation (IDF) in Vienna, a Satellite Symposium was held at the University of Göttingen on September 7th and 8th, 1979, on the interactions between endocrine pancreas and gastrointestinal tract. The existence of such interactions has been postulated for 75 years. However, general interest in this area did not start until 15 years ago when the technique of the radioimmunoassay for estimating peptide hormones in blood had been developed. Meanwhile, endocrinologists and gastroenterologists have realized the close connection between the endocrine pancreas and the gut, the so-called ‘enteroinsular axis’, a term coined by R.H. Unger in 1969. The original concept of the enteroinsular axis referred to humoral factors only and has been extended since. It now includes the neural connections between the gut and the islets. This reflects the growing knowledge of the close interrelationship between hormones and nerves in the gastrointestinal tract, especially the so-called peptidergic system.

It is surprising that during this time of countless meetings none has yet been devoted to this subject. Therefore, the research workers active in this field enthusiastically responded to the idea of a first symposium on the enteroinsular axis. The invited speakers covered morphology, physiology and pathophysiology of the system. Special emphasis was put on the recent concept
of the gastroentero-pancreatic neuroendocrine system. A potentially important clinical implication of the research on the enteroinsular axis appeared to be the effect of substances delaying or inhibiting absorption of nutrients.

Foreword X

This volume of Frontiers of Hormone Research contains the invited lectures given during the symposium and the abstracts of free papers presented in a poster exhibition on this occasion.

I thank S. Karger AG, Medical and Scientific Publishers, Basel, for publishing the proceedings of the symposium so efficiently and quickly. I am especially grateful to the Council of the German Diabetes Association and to Professor P. Berchtold, Bayer AG, Wuppertal, for their generous financial contribution to the printing costs of this volume.

Werner Creutzfeldt