The Use of Secretin and Pancreozymin in Man

The Value of Using Evocative Serum Enzyme Studies Together with Glucose Tolerance Tests in the Diagnosis of Pancreatic Disease

P.		Burton
E.M.		Hammond
A.A.		Harper
H.T.		Howat
S.		Oleesky
H.		Varley

Manchester and Newcastle upon Tyne, England

Raised values of serum amylase and lipase are found often enough in acute pancreatitis to provide valuable help in practice; in chronic pancreatitis and pancreatic carcinoma however these estimations afford little help. Even when pancreatic stimulants such as secretin, alone or combined with vagal stimulants or with morphine, are given to increase the sensitivity of the tests, inconclusive or unconvincing results are reported (Lopusniak and Bockus 1950; Dreiling and Richman, 1954).

The authors have made serial determinations of serum amylase and lipase in man following the intravenous use of their preparations of pancreozymin (Harper and Raper 1943; Crick, Harper and Raper, 1949, Duncan et al. 1950) in addition to secretion, both in

464
Burton et al.

Congress 332

health and disease. A significant elevation of serum enzymes is evoked by secretin and pancreozymin together in the early stages of chronic pancreatitis and pancreatic carcinoma, whereas in the later stages glucose tolerance is increasingly impaired. There is considerable overlap between the two tests, which used in conjunction reveal evidence of disordered pancreatic function in a large proportion of patients with chronic pancreatic disease. The secretin-pancreozymin test is sometimes positive following acute pancreatitis and occasionally in biliary and hepatic disease. The physiological and clinical significance of these findings were discussed.

We are grateful to Boots Pure Drug Company, Nottingham, who have provided much of the secretion and pancreozymin.

Bibliography

Crick, J., A. A. Harper and H. S. Raper: J. Physiol. 110, 367, 1949. – Dreiling, D. A., and A. Richman: Arch. intern. Med. 94, 197, 1954. – Duncan, P. R., A. A. Harper, H. T. Howat, S. Oleesky and H. Varley: J. Physiol. 113, 63, 1950. – Harper, A. A., and H. S. Raper: J. Physiol. 102, 115, 1943. – Lopusniak, P. M. S., and H. L. Bockus: Gastroenterology 16, 294, 1950. McHardy, G., and R. J. McHardy: Gastroenterologia 86, 464, 1956

From the Department of Medicine, Louisiana State University School of Medicine, Browne-McHardy Clinic, Charity Hospital and Touro Infirmary, New Orleans, Louisiana

The Clinical Applicability of Uropepsin Studies in Gastroenterology

By Gordon McHARDY and Robert J. McHARDY

Urinary enzymatic activity measurable as uropepsin 1, which has been stipulated to be an index of gastric peptic function²⁻⁶, has questionable clinical diagnostic applicability in gastrointestinal dysfunction and disease⁷⁻¹⁸. Influence of age^{7 > 10'}¹⁹, uremia¹⁰, protein