Watery diarrhoea and ganglioneuroma

Sir,

We read with interest the case report by Swift, Bloom, and Harris (1975) of a 5-year-old girl with watery diarrhoea and a vasoactive intestinal peptide (VIP) secreting ganglioneuroma. In April 1975 we reported raised levels of VIP in a child with chronic watery diarrhoea and hypokalaemia (Udall et al., 1975). The syndrome of intractable watery diarrhoea and hypokalaemia associated with pancreatic tumours was first described by Verner and Morrison (1958). Chronic watery diarrhoea and hypokalaemia has more recently been reported associated with pancreatic islet cell hyperplasia, neurogenous tumours, bronchogenic carcinomas, pleochromocytoma, and ganglioneuroblastoma. The syndrome has now been associated with increased serum and/or tumour tissue levels of VIP (Bloom, Polak, and Pearse, 1973; Said and Falloona, 1975). There is evidence that the tumours may arise from cells that share a common derivation from the neural crest (Said and Falloona, 1975). Such cells (APUD) have a number of similar histochemical and ultrastructural characteristics (amine precursor uptake and decarboxylation) and also the capacity to secrete polypeptide hormones. There are many questions that remain unanswered since intractable watery diarrhoea and hypokalaemia in our patient and one reported by Pabst et al. (1969) was not associated with pancreatic hyperplasia or neoplasia. Serum VIP has also been shown recently to be increased in cholera (D. Nailand, personal communication). The significance of this peptide in diarrhoeal states awaits further investigation.

JOHN N. UDALL JR., GEORGE D. FERRY, and BURFORD L. NICHOLS

Section of Nutrition and Gastroenterology, Department of Pediatrics, Baylor College of Medicine, Texas Medical Center, Houston, Texas 77025, U.S.A.

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