

Abstract:

Pancreatic involvement is considered to be the hallmark of malnutrition-related diabetes mellitus (MRDM). Of the 2 subgroups of the disease, fibrocalculous pancreatic diabetes (FCPD) is characterized by pancreatic calcification. The nature of pancreatic abnormalities in MRDM have not been studied extensively in Indian patients. The present study was designed to compare pancreatic abnormalities (exocrine and endocrine) including endoscopic retrograde pancreatography in patients with FCPD and protein deficient pancreatic diabetes (PDPD), in relation to controls. Ten patients each of FCPD and PDPD were studied with regard to clinical features, biochemical exocrine and endocrine pancreatic responses, C-peptide response, islet cell antibody, and pancreatographic changes. Five normal pancreatograms were taken as control. Clinical and biochemical features in patient with FCPD and PDPD were as follows: pain in 8 and 2 patients, respectively; the mean duration of diabetes was similar in both groups (62.28 +/- 71.92 months V. 72 +/- 50.9 months); and faecal fat excretion and insulin requirements were comparable in both groups. The main pancreatic duct was dilated in 6 of 10 patient with FCPD and only 1 of 10 with PDPD on ultrasonography. On pancreatography the duct was dilated in 9 of 10 patients with FCPD and only 1 of 10 patients with PDPD. The number of side branches was reduced in all cases with MRDM; in those with FCPD, these were stunted and dilated while in PDPD side branches are thin and spastic. We conclude that pancreatic ductal changes involving the main duct and side branches are more frequent in patients with FCPD as compared to those with PDPD.