The present review is based on one of the largest series dealing with many aspects of this dreadful disease. It is unfortunate that 3 patients with leiomyosarcoma of the duodenum, sarcoma of the head of pancreas and islet cell tumour have been included in a study bearing the heading of carcinoma of pancreas. Most of the recommendations are in line with those already published. For example, it has already been recommended that gastrointestinal surgery should preferably be done along with Biliary bypass (Abst. NJJ Surg 1980: 50: 462; Surg Gyneco Obstet 1960; 151: 794). The present controversy mainly surrounds the choice of resection. The theoretical advantages of total pancreatectomy are that (a) multinodular foci are removed; (b) it eliminates pancreatic anastomosis, a major cause of morbidity, and (c) no radical resection is possible (Scand J Gastroenterol 1982; 17: 449). However, certain differences in previous studies have been observed. Diabetes after total pancreatectomy is often quoted to be not severe (Arch Surg 1975: 110: 506), while it was not so in 50% of patients in the present case. Also the anastomotic pancreatic leaks were not a problem in this series. There was also no difference in survival after total pancreatectomy while some studies showed prolonged survival (Ann Surg 1979; 189: 129, Mayo Clin Proc 1979: 54: 468). It is worthy of note that a comparison is made between the two surgical procedures of resection in the same hospital and that the two groups were well matched. However, to make real good comparison and draw meaningful conclusions, a large scale, randomised study of patients with resectable lesion of the head of pancreas is needed. Till such time, the surgical procedure of choice will largely depend on the individual preferences of the operating surgeon. The aggressive investigative and surgical approach together with adjuvant chemotherapy and radiotherapy may hopefully, in the future, change the dismal scene prevailing in this field.

Bombay

V SANTHI SWARoop

ANOTHER POSSIBLE CLINICAL USE OF SERUM BILE ACID DETERMINATION

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Diagnostic value of serum primary bile acids in detecting bile acid metabolism. Gut 1982; 23: 829—34

In the present study the authors have measured by radioimmunoassay serum cholic acid and chenodeoxycholic acid (CDCA) conjugates during fasting and after meals in 14 patients with bile acid malabsorption secondary to ileal resection. Five patients with colostomy for ulcerative colitis and 10 healthy subjects were also studied for control purposes.

In all the patients, bile acid malabsorption had been previously demonstrated by breath analysis and faecal excretion of 14C after oral administration of cholic 1-14C glycine. The patients had normal liver function tests and normally functioning gallbladders.

The ratio of serum cholic and chenyl conjugates as well as that of glycine and taurine conjugates of cholic and chenodeoxycholic acid in serum were evaluated in each of them during fasting and after meals.

In healthy subjects, in the fasting state, CDCA was the predominant bile acid in serum. Its peak was higher and was reached within 90 minutes after the meal compared with serum cholic acid in which the peak rise occurred about 120 minutes after the meal and it was not so sharp and high as that of CDCA. In patients with bile acid resection, mean fasting levels of cholic and CDCA did not differ from controls. Postprandially however, rise in cholic acid levels was lower than in controls (p<0.001) and sometimes even absent. Chenodeoxycholic acid postprandial levels did not differ significantly from controls. In the collectivized patients serum fasting levels of cholic and chenodeoxycholic acid were similar to controls. Maximum rise in cholic acid after food were not significantly different in them from those in healthy subjects, while maximal rises in CDCA after meals were lower (p<0.01) compared with controls. The ratios of CDCA/cholic acid remained unaltered in healthy subjects and cholestochelly patients, while it increased in patients with ileal resection due to a relative serum enrichment of CDCA in them.

The sera from patients with ileal resection, the glycine/taurine ratio for cholic and CDCA increased (p<0.001) from morning to evening and glycine/taurine ratio for CDCA was significantly (p<0.01) different from the control sera collected in the evening.

The results of this study are consistent with the concept of a better intestinal conservation of chenyl, mainly of the glycine conjugated form, than of cholic conjugates. The postprandial peaks of serum cholic acid conjugates may therefore be regarded as a test of ileal dysfunction, while peaks of CDCA conjugates suggest colonic impairment.

Comments

The authors' contention that postprandial serum bile acid levels give information about the presence of malabsorption is based on the belief that because of selective intestinal absorption two different enterohepatic circulation pathways exist for cholic and chenodeoxy bile acids. The ratio of small amounts of cholic acid conjugates did not significantly change in the controls throughout the day while in patients with ileal resection a significant increase of chenyl conjugates compared with cholicyl conjugates was observed suggesting malabsorption. Secondly, cholic acid postprandial peaks may be a marker of ileal disease, while those of CDCA about colonic impairment. Earlier studies however, are not in total agreement with these observations and further trials are needed to establish confidence in clinicians with regard to the clinical relevance of these serum bile acid estimations during malabsorption studies.

New Delhi

SHIV K SARIN

RAKESH K TANDON

LETTER TO EDITOR

Vitamin C therapy: Lack of effect in fulminating hepatic failure

Dear Sir,

Knodell et al recently reported on the lack of effect of vitamin C prophylaxis for post transfusion hepatitis. We had undertaken a prospective randomised controlled trial of vitamin C therapy in fulminant hepatitis. 20 cases of fulminant hepatitis in grade 3 and 4 coma were prospectively randomised into 1 without and 9 with vit. C groups. The patients received 6 g/day of vitamin C intravenously in three divided doses. Both groups received standard supportive antioma measures including Neomycin. The vitamin C group also received hydrocortisone 100 mg 6 hourly (i.v.) for the first 48 hours. Five of the eleven (45%) of the control group and three of nine (33%) of the treated group survived. The difference was not significant. Neither was there any significant difference in the duration of survival. Our study suggests that vitamin C in doses claimed to be viridical combined with a short course of hydrocortisone does not improve the survival in patients with fulminant hepatic failure.

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References
