

Selected Abstracts

Pages with reference to book, From 107 To 110

Continuous Ambulatory Peritoneal Dialysis; Prospects and Results (Kontinuierliche ambulante Peritonaaldialyse, Vorund Nachteile). G. Descoedres. Schweiz Med. Wochenschr., 1981, 111: 293.

CHRONIC HEMODIALYSIS, in spite of some degree of skepticism on the part of physicians and hospital administrators, remains the most common method of managing chronic kidney failure in Europe. Barely 2 per cent of all such patients are managed by intermittent peritoneal dialysis. Since 1975, three North American centers have developed the technique of continuous ambulatory peritoneal dialysis and nearly 20 per cent of the patients who were treated for chronic kidney failure in Canada are managed by this method. Continuous ambulatory peritoneal dialysis offers the advantages of simplicity, lack of need for outside assistance, no need for apparatuses, electrical or water connections, no need for vascular access or anticoagulants, a more continuous physiologic course than with either hemodialysis or intermittent peritoneal dialysis and in the absence of complications, economy.

The principle of the technique involves the patient continuously maintaining two liters of dialysate in the peritoneal cavity which is changed four to five times a day. The advantages of continuous ambulatory peritoneal dialysis involve improved weekly clearances as opposed to intermittent peritoneal dialysis, as well as greater clearance of high and middle molecular weight substances than does hemodialysis. The technique also offers better control of the blood pressure, anemia and phosphorus. An improvement in sexual function has been reported and continuous peritoneal dialysis permits greater liberalization of the diet than does intermittent dialysis. Once the patient is in equilibrium, he can be spared a portion of his regular blood testing for control.

The complications include catheter problems such as malposition, obstruction, leak and tunnel infections as well as peritonitis. Hypoproteinemia is seen after a period of time and because of the absorption of glucose from the dialysate, there is initially an improvement in nutrition with better albumin utilization, but may eventually lead to obesity or hypertriglyceridemia. Obstipation was common in patients who were treated with continuous peritoneal dialysis. Finally, the technique is time consuming, requiring approximately 21 hours a week for dialysate changes as compared to 36 hours a week for intermittent peritoneal dialysis and nine hours a week for hemodialysis.

-Irving B. Margolis

Multiple Intestinal Atresias; Pathology and Pathogenesis. K. Teja, P. Schnatterly and A. Shawl. Pediatr. Surg., 1981, 16. 194.

A FEMALE INFANT who appeared normal at birth, but was subsequently found to have multiple areas of intestinal atresias and stenoses is reported. Pathologic examination of the resected areas of intestine revealed various stages of severe inflammation. This resulted in a sieve-like appearance of cross-sections of the intestine. A review of the literature is done and where available, similar histologic descriptions were found.

Notably absent in all patients were vascular lesions or mechanical obstructions related to the atresias. All patients, except one, had antral and rectal atresias associated with others throughout the intestine, Autosomal recessive inheritance has been reported as part of that syndrome. It was concluded that the syndrome of multiple intestinal atresias is a distinct pathologic entity, probably associated with a specific genetic pattern and a dismal prognosis.

-Jane F. Goldthorn

Obstruction Without Dilation; Importance in Evaluating Jaundice. Clifford Beinart, Stavros

Efremidis, Burton Cohen and Harold A Mitty. J.A.M.A., 1982, 245 353.

BY MEANS OF transhepatic cholangiography, it was shown that surgical jaundice may present in patients without dilated intrahepatic ducts with or without common bile duct dilation. Using a 22 gauge chiba needle, 150 patients underwent percutaneous transhepatic cholangiography and 16 had partial or complete impairment of flow without intrahepatic ductal dilation, although five of these patients had a dilated common duct. Furthermore, ultrasound was performed in five of 16 patients but, did not demonstrate the cause of the jaundice which ranged from 1.5 to 27.1 mgm/dl. of bilirubin.

Parenthetically, all patients had elevated alkaline phosphatase levels. The three main causes of jaundice in the patients with nondilated hepatic ducts were metastatic disease to the porta hepatis, benign strictures and calculi. Eleven patients had partial obstruction and five had complete obstruction.

The apparent paradox of obstruction with-out intrahepatic dilation present in 9 per cent of this series of cholangiograms can be explained by Laplace's law, the possibility that periductal tumor growth encases the bile ducts and prevents dilation or a ball-valve mechanism which can cause jaundice without distention. It was stated that 77 per cent of patients who had surgical jaundice would have the condition identified sonographically by signs of dilated intrahepatic ducts. It was added that transhepatic cholangiography was successful in opacifying a nondilated biliary tree in about 90 per cent of patients. As opposed to ultrasound and computed tomography, transhepatic cholangiography was extremely sensitive in detecting the cause and level of obstruction.

It was concluded that when biochemical evidence of surgical jaundice is present and any doubt remains as to the cause of jaundice, even though computed tomography and ultrasound fail to show any evidence of biliary ductal dilation, transhepatic cholangiography should be performed. It remains the single most definitive nonsurgical method of differentiating surgical from medical jaundice.

-Philip W. Susann

Incidental Appendectomy?-Yes. B. I. Tranmer, A.M. Graham and F. Stems. Can. J. Surg., 1981, 24: 191.

APPENDICITIS in patients over 40 years of age has an increased morbidity of a variety of reasons, among them, late diagnosis, concomitant diseases and relatively less tolerance to the stress of operation. One-hundred patients were reviewed to determine who could have potentially benefited their past. from having had an incidental appendectomy in their past.

The patients were divided into three groups of 100 each; the first group had acute appendicitis the second group had previous elective cholecystectomy and one-half of them had incidental appendectomy. The third group had elective gynecologic procedures and one-half of them had incidental appendectomy. The patients who underwent incidental appendectomy had a low rate of problems related to the appendectomy and there was no apparent morbidity associated with incidental appendectomy in either of these types of patients.

However, patients over 40 years of age in the group which had acute appendicitis has a 36 per cent complication rate. Thirty per cent of them had wound infections and 42 per cent of the patients had perforation at the time of operation. Thirteen of these patients could have undergone incidental appendectomy in their past. It was concluded that incidental appendectomy is a relatively benign procedure, has the potential for averting morbidity and, if nothing else, eliminates the option of appendicitis as one of the diagnoses for abdominal pain in the elderly.

-William E. Gotthold

Colorectal Carcinoma in Patients Less Than 40 Years of Age; Pathology and Prognosis. Edward W. Martin, Jr., Steven Joyce, Joel Lugas and others. Dis. Colon Rectum, 1981, 24: 25.

CARCINOMA of the colon and rectum is the second most common cause of death from cancer in all sites in both sexes. Its peak incidence in patients is between 60 and 70 years of age and is uncommon in patients less than 40 years of age. This study was undertaken to evaluate the behaviour of the malignant

lesions of the colon in 37 patients ranging in age from 18 to 40 years. Data was available for the years 1960 to 1970.

Symptoms that were typical of malignant lesions of the colon and rectum were present in patients for an average of 10.4 months. A positive family history, previous colonic disease, or immunosuppression were present in 22 patients, 59 per cent. The distribution of the lesions was unusual in that only 40 per cent were within reach of the sigmoidoscope, and only 7.5 per cent of the lesions could be palpated on rectal examination.

Duke's staging of the lesions at diagnosis was improved in distribution to that reported in the adult population, 51 per cent localized versus 40.1 per cent. The histologic characteristics of the tumors were not unusual; however, the incidence of poorly differentiated carcinomas, 18.9 per cent and mucin-producing carcinomas, 10.8 per cent was increased. Perineural invasion was associated with disseminated disease and vascular invasion was associated not only with disseminated disease, but also with a poor prognosis. The over-all five year survival rate was 56.8 per cent. The five year survival rate in 24 patients who underwent curative resection increased to 70.8 per cent.

Carcinoma of the colon and rectum in patients under 40 years of age is unusual and delay in diagnosis is common. The distribution of lesions is more homogeneous than seen in older patients and high-grade malignant conditions are more frequent. The survival data in this series are more favorable than those generally reported. Improved five year survival rates after potentially curative resection, 70.8 per cent stresses the need for early diagnosis and treatment.

-Orville F. Grimes

Gastric Cancer and Cimetidine. T.V. Taylor, David Lee, A. C. Howatson and others. J.R. Coil. Surg. Edinb., 1981, 26:34.

FIVE PATIENTS with chronic duodenal or gastric ulcers are presented with initial roentgenographic and endoscopic evidence of benign ulceration. In the early stages of treatment, specimens taken at biopsy were benign in two patients. In all patients, symptoms were relieved and roentgenographic and endoscopic findings suggested healing of the ulcers after treatment with cimetidine. The duration of cimetidine therapy in patients varied from two months to seven years. All patients eventually had recurrence of symptoms and were subsequently found to have carcinoma.

Four patients had ulcerative adenocarcinoma develop and one was found to have extensive linitis plastica as well as two chronic duodenal ulcers. It was observed that certain amines can be transformed in acid aqueous media to N-nitroso compounds, some of which are known to have mutagenic and carcinogenic properties.

It is clearly stated that no causal link between cimetidine and carcinoma of the stomach has been proved; however, this experience and others recently reported cast doubt on the safety of long term cimetidine therapy. Further studies are needed to clarify the presence or absence of a causal relationship.

-Don L. McCord

Hemorrhoids; a Plea for Nonsurgical Treatment. A.A.Deutsch, Z. Kaufman and R. Reiss. 1st. J. Med. Sci., 1980, 16: 649.

HEMORRHOIDS are a frequent problem in humans. When they are symptomatic they have a considerable economic impact, particularly if they are surgically treated. There are many different therapeutic treatments available, from conservative medical regimens to radical extirpation of all tissue bearing pile.

The various therapeutic modalities consisting of injection therapy, elastic band ligation, cryosurgery, anal dilation, lateral subcutaneous sphincterotomy, 'anal dilation, lateral subcutaneous sphincterotomy and operation were discussed. The available controlled comparative trials of different treatment for hemorrhoids were reviewed. The following conclusions were drawn: conservative nonoperative

therapy is the most appropriate treatment of hemorrhoids; hemorrhoidectomy is not necessarily the most effective form of treatment for hemorrhoids and should rarely be used; elastic band ligation is the most satisfactory nonsurgical treatment; anal dilation is a highly satisfactory alternative to hemorrhoidectomy; injection therapy is not as effective as either elastic band ligation or hemorrhoidectomy. and cryosurgery offers no advantage over elastic band ligation. It is believed that the use of hemorrhoidectomy can be almost eliminated by the use of conservative therapy, elastic band ligation or anal dilation.

-Roland S. Philip.

Cancer of the Stomach. Alton Ochsner, Thomas E. Weed and William R. Nuessle. Am. J. Surg., 1981, 141 : 10.

THE INCIDENCE of carcinoma of the stomach is decreasing in western nations; whereas, in some eastern countries it is a progressively more severe problem. The variable incidence may be related to the high consumption of rice and salty foods that occurs in Japan and the ingestion of high amounts of fat, alcohol and tobacco.

Treatment is not much better in the United States than it was many years ago primarily because the diagnosis is made at a late stage. Diagnosis has depended greatly on roentgenograms but now with the widespread use of fiberoptic endoscopy the hope is for earlier diagnosis. Endoscopy is not thought to be cost effective for mass surveys, but it is for high risk groups of patients which include those patients with pernicious anemia, chronic atrophic gastritis, gastric polyps and those who previously underwent gastrectomy and also those patients over 45 years of age with roentgenographically negative but persistent dyspepsia. Endoscopy should be routinely recommended.

The survival rate for patients with carcinoma of the stomach has been exceptionally poor with 11 per cent five year survivals reported. The poor prognosis is related to the fact that 85 per cent of patients have direct invasion extending through the muscularis of the stomach at the time of diagnosis and treatment. Those patients with gastric complaints, who do not respond quickly and completely to medical therapy should be seen by a competent endoscopist and multiple biopsies of the gastric mucosa obtained. The burden is on the physician who first sees the patient. The fact that these measures can be effective is attested to by Japanese authors who currently report a 40 per cent five year survival in patients.

-Keith E. Thompson

Unusual Inflammatory Processes Involving the Colon. Barry D. Toombs, Carl. M. Sandier, Jesus Zornoza and William P. Harbin South. Med. J., 1981, 74: 400.

SIX PATIENTS with inflammatory disease affecting the colon are reported upon. The first patient a 64 year old man, presented with colic from a tuberculous stricture of the transverse colon secondary to pulmonary disease. The more usual site is the cecum or ascending colon. A long constriction of the splenic flexure and descending colon was demonstrated in a 26 year old patient with pancreatitis who suffered from alcoholism. Colonoscopy confirmed eccentric narrowing with ulceration. This lesion resembles ischemic colitis and cancer. Eccentric involvement suggests disease of the mesocolon. The third patient, a 50 year old woman, exhibited localized giant pseudopolyposis of the splenic flexure causing obstruction. Granulomatous colitis had been diagnosed five years previously.

Hyperplastic masses are seen in 10 to 20 per cent of patients with inflammatory intestinal disease, rarely in ischemic bacterial or amebic colitis. Severity rather than chronicity appears to be the inciting factor. Obstruction can result from intussusception. Primary neoplasm cannot be excluded. An 80 year old woman presented with sigmoid obstruction from a gallstone, with intrabiliary air. Results of postoperative barium studies demonstrated a cholecystocolic fistula.

A 17 year old girl had been operated upon three years previously for appendicitis. Cutaneous fistulae necessitated two subsequent procedures. She was readmitted with fever and fistulae. Results of barium

study revealed mucosal irregularity of the right colon and characteristic sulphur granules of actinomycosis were found at exploration. The last patient, a 35 year old woman, had constipation and tenesmus develop. Results of barium studies revealed marked narrowing and destruction of the rectosigmoid with a rectovaginal fistula. Biopsies showed lymphogranuloma venereum. This disease is a manifestation of a Chlamydia infection. Differential diagnosis includes ulcerative or granulomatous colitis, ischemic colitis, anorectal gonorrhoea and radiation colitis.

-Raymond C. Read