

Selected Abstracts

FROM SURGERY OBSTETRICS AND GYNECOLOGY

Long-Term Follow-up Study of Patients Operated on for Benign Peptic Ulcer.

A. Hakkiluoto. *Ann. Chir. Gynecol. Fenn.*, 1976, 65:361.

Two hundred consecutive patients operated upon for gastric ulcer or duodenal ulcer from 1956 to 1957 underwent follow-up study until 1974. Twenty-five of them died within five years of primary operation and were excluded to eliminate the possibility of co-existing ulcer and malignant disease at the time of operation. Four patients could not be traced and 65 died within the follow-up period, but none of them had carcinoma of the stomach. Forty-six of 106 living patients came for re-examination, and gastroscopy was performed in 42. The remaining 60 patients were examined by questionnaire. According to a Finnish cancer registry none of them had carcinoma of the stomach.

The expected number of carcinomas of the stomach in the present series was calculated to be 2.3 and of all malignancies 13.6, but only one carcinoma of the stomach and 19 other malignant tumors were detected. Carcinoma of the stomach detected endoscopically and verified by biopsy cytology was microscopically anaplastic. Most of the patients were in excellent general condition without gastric complaints. The patient series revealed no clear cut causal relation between gastric resection and late development of stump carcinoma.

Robert J. Capehart

An Elemental Diet as Preoperative Preparation of the Colon. J.F. Gurry and R.S. Ellis-Pegler. *Br. J. Surg.*, 1976, 63:969.

Fifty-one patients were studied to compare the effectiveness of an elemental diet, 1,800 ml of Vivonex by mouth per day, versus a normal ward diet as a means of preoperative intestinal preparation. Twenty-four patients received a ward diet and enemas over four days prior to operation. These patients served as controls. Seven patients received two days of ward diet followed by two days of Vivonex as well as four days of preoperative enemas. Finally, 20 patients received four days of Vivonex and enemas. No preoperative antibiotics were used in any group.

Results revealed that the two day Vivonex preoperation was totally inadequate as a preoperative intestinal preparation. Subjective determination as the time of operation revealed adequate intestinal preparation in 25 percent of the controls

and 80 per cent of patients treated with four days of Vivonex.

Bacteriologic studies demonstrated no significant difference between the groups. The wound infection rate was extremely high in all groups studied, being 45 per cent in controls and 50 per cent in patients treated with four days of Vivonex preparation. It would appear from this study that a four day intestinal preparation with Vivonex and enemas without orally administered antibiotics is inadequate in preparation of the patient for operations on the colon.

Michael Weinstein

The Elective Surgical Treatment of Duodenal Ulceration; Choice of Operation. M. Hugular. *Ann. Chir.*, 1976, 30:977.

Ten recently documented prospective randomized comparisons of the results of gastrectomy and various types of vagotomy and drainage procedures have been reviewed to determine which operation is best. The majority of the data applied to men. Zollinger-Ellison syndrome was excluded. Few clear cut differences emerged. However, the recurrence rate was least after gastrectomy, or better, antrectomy plus truncal vagotomy. Unfortunately, the mortality was higher than when vagotomy and pyloroplasty were used. Diarrhea was more likely to follow vagotomy, but more patients had satiety, lost weight and became anemic after gastrectomy. Dumping was more frequent after antrectomy as compared with pyloroplasty. Gastroenterostomy induced more bile reflux. Parietal cell vagotomy gave rise to the fewest postoperative complaints, but some investigators reported more recurrences with this procedure. At the present time, given experience with a number of techniques, the choice of procedure should be dictated by the findings encountered at operation.

Raymond C. Read

Surgery for Duodenal Ulcer; a Study Relating Indications to the Results of Surgery. Donald D. Ohme, Johnny Brawner and Robert E. Hermann. *Am. J. Surg.*, 1977, 133: 267.

Two hundred and thirteen patients operated upon for primary duodenal ulcer disease by a single surgeon between 1963 and 1974 were followed for two to 12 years. The mean follow-up period was 6.3 years.

Indications for initial surgical intervention, that is, bleeding and obstruction, with the long and short term results are presented. It was hoped to identify by indication alone those patients who should undergo vagotomy and

antrectomy as opposed to the great majority believed to do well with a vagotomy and pyloroplasty or a vagotomy with enterostomy. Growing dissatisfaction with serum gastrin levels was cited as the reason for the study. Dissatisfaction with acid secretory studies was established as correlating to the proper operative choice.

In this series, 108 patients underwent operations for intractability, 57 for outlet obstruction, 37 for hemorrhage and 13 for perforation. There were no elective surgical deaths. Mortality in the group who had emergency surgical treatment was 19 per cent. For the entire series, the vast majority of whom had undergone vagotomy with pyloroplasty, there was an 85 per cent excellent to good results, a 5 per cent dissatisfaction result and a 10 per cent ulcer recurrence rate. The group with obstructing ulcer had the best results with conservative surgical treatment. The series suffered from lack of significant numbers of vagotomies with antrectomy.

Unfortunately, there was only a modest correlation between indications for operation and long term results. More specifically, neither bleeding nor perforation differed greatly in recurrent ulcer rates from intractability or obstruction.

Michael J. Torma

Gallstone Pancreatitis with Normal Biliary Radiology. Rodney Smith, Russell Williams and P.B. Cotton. *Br. J. Surg.*, 1976, 63:861.

Three patients with proved gallstone pancreatitis, normal oral cholecystograms and intravenous cholangiograms were reported. Conventional roentgenograms should not necessarily be accepted as conclusive evidence and further studies, such as endoscopic cholangiopancreatography should be considered. Each patient in this series had preoperative exclusion of metabolic pancreatitis with operative confirmation of chronic cholecystitis and cholelithiasis. A high index of suspicion for gallstone pancreatitis, especially in women with recurrent attacks, is warranted in spite of normal biliary roentgenography.

Michael S. McArthur

Reappraisal of Surgery for Suppurative Cholecystitis. Steffen Bulow, Ole Kronborg and Jens Lund-Kristensen. *Arch. Surg.*, 1977, 112:282.

An investigation was undertaken to find which factors influenced mortality and rate of repeat laparotomy after emergency operations for empyema of the gallbladder and thereby to obtain a rationale for the extent of acute surgical treatment in these rare instance. Ninety-two patients were studied retrospectively.

The mortality after cholecystectomy alone was positively correlated to males, obesity, pulse rate and the presence of stones in the common bile duct. Mortality after cholecystectomy with choledochotomy and T-tube drainage was not related to these variables. Mortality after cholecystostomy was related to shock, septicemia or the two combined. Surprisingly, in none of the groups was mortality related to cardiopulmonary diseases, antibiotic therapy or duration of symptoms. Additionally, no mortality resulted from cholecystostomy when it was performed solely because of technical difficulties.

Mortality in patients having stones removed from the bile duct and in those with untouched common bile duct stones did not differ significantly. However, seven of eight patients in the latter group required reoperation.

It was concluded that suppurative cholecystitis with accompanying bile duct stones should be treated with cholecystectomy and choledocholithotomy. Exceptions included clinically deteriorating patients or patients in whom technical difficulties occurred during operation. For these, cholecystostomy alone was advocated as the only procedure. It was implied that, if suppurative cholangitis existed, only liberal decompression of the common bile duct itself would suffice.

Michael J. Torma

Advances in the Diagnosis of Pancreatic Disease; Endoscopic Retrograde Pancreatography. P.K. Ratochvil, G. Brandstatter and F. Wiednear. *Zentralbl. Chir.*, 1976, 101:1345.

One hundred and seventy of 191 attempted endoscopic retrograde cannulations of the ampulla of Vater demonstrated either the pancreatic duct, the common bile duct or both. Attention is focused on the 135 demonstrations of the pancreatic duct.

The indications were pancreatitis in remission, suspicion of complications of pancreatitis, suspicion of tumor, pancreatic insufficiency of uncertain cause or residual symptoms after an operation on the pancreas. Normal ductal caliber varies with age but ranges from 3.4 to 4.8 mm at the head of the pancreas, from 2.7 to 3.5 mm in the body and averages 1.5 mm at the tail. The normal pancreatic duct empties quickly and is contrast free by ten minutes after injection.

Acute pancreatitis and sepsis may complicate the procedure as a result of infection, papillary edema, the osmotic pressure of the contrast material or high injection pressure. To avoid the latter problem, fluoroscopic control is recommended. In this series, only two instances

of mild pancreatitis resulted, and these subsided completely after three days.

The findings of beading or segmental strictures and stenoses are not pathognomonic of chronic pancreatitis, and the study may need to be complemented by angiography. In fact, a normal ductal system is not incompatible with chronic pancreatitis, and ductal narrowing and irregularity may be associated with a normal parenchyma. The diagnosis of chronic pancreatitis formerly depended upon clinical signs, the analysis of pancreatic secretions and stool fat evaluation. These data did not always lend to an exact classification of the disease and a prediction of the form and extent of the inflammatory process. Endoscopic retrograde cholangiopancreatography has been most helpful in answering these questions.

Survival in 200 Patients Treated by Haemodialysis and Renal Transplantation. F.Z. Henari, P.E. Gower, J.R. Curtis and Others. *Br. Med. J.*, 1977, 1:409.

Two hundred patients were entered into this study as it became necessary for them to begin hemodialysis. The more common underlying renal diseases were chronic glomerulonephritis polycystic renal disease and nephrosclerosis secondary to hypertension. The types of vascular access, dietary controls, medications, monitoring and patient selection for transplantation are discussed. Forty-six patients underwent renal transplantation. The techniques are discussed.

Survival rates of patients on dialysis were 91.2 per cent at one year, 77.6 per cent at three years and 71.5 per cent at five years. Seventy-six and nine-tenths per cent of patients who had received a transplant survived at one year with a cadaveric graft survival rate of 51.1 per cent, and 76.9 per cent survived three years with a cadaveric graft survival rate of 47.8 per cent. These figures were unchanged at five years. These figures closely agreed with the "Proceedings of the European Dialysis and Transplantation Association". The over-all survival rates of all 200 patients were 81.4 per cent at two years, 68.4 per cent at five years and 60.8 per cent at eight years, although the patients in the age group 15 to 34 years did have significantly survival rates.

Michael J. Chehval

Carpal Tunnel Syndrome; Report of 430 Operations. Janes V. Gainer Jr., and G. Robert Nugent. *South Med. J.*, 1977, 70:325.

In a ten year period, 326 patients, 430 wrists, were operated upon for median nerve compression. A curved longitudinal skin incision was used. Sixty-five per cent of the patients were females; only one patient was less than 20 years

of age. The dominant hand was more severely involved in 66 per cent of the patients. Before operation, pain was almost always present in the fingers and hand, but 12.5 per cent of the patients complained of pain in the forearm, 7.7 per cent in the elbow, 4.2 per cent in the upper arm, 14 per cent in the shoulder and 2.3 per cent each in the neck or wrist. In 78 per cent of the patients, the pain was worse at night. Tapping the volar wrist caused paresthesias in 77 per cent of the patients, phalen's sign was positive in 69 per cent, and 44 per cent of the patients had some weakness of the thenar muscles. Eleven and three-tenths per cent of the patients were diabetic. Electromyogram in these patients confirmed the presence of a carpal tunnel syndrome rather than diabetic neuropathy.

Seventy-one per cent of the patients responded to a questionnaire. Fifty-one per cent considered themselves cured by the operation, and another 10 per cent thought they had been improved at least 50 per cent by the operation.

This is an excellent statistical report. The preoperative findings and postoperative results are almost identical to those reported by Phalen in 1960.

Herbert H. Starke