

## Selected Abstracts

**Recurrent Duodenal Ulcer.** D. TASSE et al. (Hospital Saint-Luc, Montreal, PQ, Canada) *Can. J. Surg.*, 21:306-312 (July) 1978.

In the past six years 26 patients had surgery for recurrent duodenal ulcer after what was considered to be an adequate initial operation. In these patients it was necessary first to demonstrate the recurrent ulcer and then to determine its cause. Endoscopy was the best means of confirming the diagnosis. The cause for recurrence was determined by tests for gastric acid secretion; 70% had hyperacidity and 80% had positive results of the Hollander test. Treatment is always surgical but varies depending on the type of initial surgery, the primary cause of recurrence, and the condition of the patient. Ten patients underwent vagotomy, 12 had vagotomy with antrectomy, and four had antrectomy alone. There were no operative deaths, but nine (35%) patients experienced 11 significant postoperative complications.

**Lactic Dehydrogenase Isoenzyme Determination in the Diagnosis of Acute Myocardial Infarction.** G. VASUDEVAN et al. (M.A. Varat, Montefiore Hosp., Pittsburgh, PA 15213 *Circulation*, 57:1055-1057 (June) 1978.

Lactic dehydrogenase (LD) isoenzymes were determined by a rapid, simple technique and their utility in the diagnosis of acute myocardial infarction (AMI) was evaluated. LD isoenzymes were separated by ion-exchange column chromatography using DEAE-Sephadex. The cardiac fractions (LD1 and LD2) were measured separately on an Abbott ABA-100 analyzer and ratio of LD isoenzyme 1 to LD isoenzyme 2 (LD1:2) calculated. Daily serum samples were obtained from 100 patients selected only for a history of chest pain of abrupt onset. In 47 patients whose diagnosis was acute myocardial infarction (AMI), confirmed by typical clinical presentation and typical rise in cardiac-specific creatine kinase isoenzyme (MB), peak LD1:2 ranged from 0.77 to 2.26. In 44 patients without AMI, peak LD1:2 ranged from 0.25 to 0.76. In two patients with electrocardiographic changes chest pain occurred two and five days previously; there was no rise in MB but LD1:2 was elevated. Four patients with small AMI had no rise in LD1:2. Three more patients (one with active hemolysis) had false positive results. Thus, there was a sensitivity of 96% and a specificity of 97% when the cut-off point was LD1:2=0.76.

LD1:2 is not quite as sensitive or specific as MB, but the ratio allows for the diagnosis of infarction in cases where MB has already returned to normal.

**Coronary Bypass Graft Fate.** G. M. Fitzgibbon et al. (National Defense Medical Centre, Ottawa, Ontario, Canada) *Circulation*, 57:1070-1074 (June) 1978.

All 1,400 coronary bypass grafts, in 409 survivors of 414 patients undergoing 440 consecutive bypass operations, were selectively opacified in multiplane cineangiograms prior to hospital discharge and 1,132 (81%) were restudied at one year. Grafts were graded A (excellent), B (fair), or O (occluded) by separate assessment of proximal and distal anastomoses and bypass trunks. In early graft studies 89% were patent (A and B), 79% graded A; at one year, 81% were patent, 74% graded A. Circumflex-marginal grafts fared less well early, but similarly late, compared with other grafts. Of all grafts graded B early, 37% became A, 39% remained B, and 24% were occluded at one year; 90% of early graded A grafts remained so, 4% became B, and 6% occluded; the grading system seems to have had useful predictive value. Distal anastomosis defects dictated early B grading in 81.3% of cases, trunk defects in 12.5%, and proximal anastomosis defects in 2.7%. Trunk defects carried a worse prognosis for occlusion than did distal anastomosis defects. Side-to-side vein-coronary anastomosis had a significantly higher patency rate than terminal end-to-side coronary anastomosis with the same veins.

**Risk of Infection With Hepatitis B Virus in Laboratory Staff.** E. K. KUWERT (Universitätsklinikum, Essen, West Germany) and N. Scheiermann *Dtsch. Med. Wochenschr.*, 103:1065-1067 (June 30) 1978.

Considerable differences were discovered when 61 student technicians and 86 qualified laboratory staff were investigated for presence of hepatitis B surface (HBs) antigen and HBs antibodies (anti-HBs) in the blood. HBs antigen was not found in the trainees whereas 4.7% of the qualified personnel were HBs antigen-positive. Anti-HBs were found in 6.6% of the trainees and in 36.1% of qualified technicians. These data demonstrate the considerable risk to medical personnel of hepatitis B virus, particularly in laboratories. For prophylaxis of virus hepatitis B in laboratory personnel special hygienic measures, routine blood investigations for HBs antigen and anti-HBs, planned placing of anti-HBs

positive personnel, and value of passive immunization with anti-IBs immunoglobulins should be stressed.

**Effect of Operation on B and T Lymphocyte Counts.** Y. T. N. LEE et al (Tumor Surgery Service, Los Angeles County-USC Medical Center, Los Angeles, C.A 90033) *J. Surg. Oncol.*, 10:289-298 (No. 4) 1978.

From preoperative and postoperative studies of peripheral B and T lymphocyte counts in 21 patients, diagnosis included ten patients with carcinoma of the breast, three with sarcoma, and eight with benign diseases. On postoperative day one and two, an increase in B cell percentage was observed in the majority of patients. However, there was a decrease in total lymphocyte count and fast-reacting T lymphocyte numbers on postoperative day one, especially in patients who had intra abdominal operations.

**Liver Function Tests After Ligation of Hepatic Artery.** Y. T. N. LEE (Los Angeles County-USC Medical Center, Los Angeles, CA 90033) *J. Surg. Oncol.*, 10:305-320 (No. 4) 1978.

Nine patients with unresectable primary and secondary malignancy of the liver had ligation of the hepatic artery (HAL) distal to gastroduodenal artery as a therapeutic measure. Another patient had similar operation for hepatic artery aneurysm. Their postoperative liver function tests were studied and the patterns of changes compared with three other patients who had extensive resection of tissues but without HAL. It appeared that liver function tests rarely became abnormal after major operations, whereas HAL produced an immediate rise in the levels of lactic dehydrogenase and transaminase (5 to 60) times normal value) and creatine phosphokinase (4 to 15 times normal). All elevated enzymes returned to preoperative levels within a week. Alkaline phosphatase and bilirubin levels rose slightly after HAL and returned to preoperative range in about one week. However, if the patient had repeated surgical stress, anoxic insult, or maximal loss of the hepatic parenchyma, serum enzyme levels only rose slightly after HAL.

**Effects of Therapy on Plasma High-Density Lipoprotein-Cholesterol Concentration in Diabetes Mellitus.** G. D. CALVERT et al. (Flinders Medical Centre, Bedford Park, South Australia) *Lancet*, 2:66-68 (July 8) 1978.

In 122 diabetic patients there was a significant inverse correlation between plasma high-density lipoprotein (HDL)-cholesterol

concentrations and glycosylated hemoglobin concentrations. In an insulin-treated subgroup improvement in diabetic control, confirmed by a decrease in glycosylated hemoglobin concentrations, was accompanied by a significant rise in plasma HDL-cholesterol concentration. Improved diabetic control may diminish the risk of premature ischemic heart diseases. When three groups of patients on different treatments were matched for age, sex, weight, and diabetic control, diabetic patients receiving sulphonylureas had significantly lower plasma HDL-cholesterol concentrations than those receiving insulin or on diet alone, or non-diabetic controls. Sulphonylurea administration may constitute a positive risk factor for ischemic heart diseases in diabetic patients.