Selected Abstracts

FROM SURGERY OBSTETRICS AND GYNECOLOGY

Wound Infection; Acute Versus Chronic Cholecystitis. Alex M. Stone, Victor J. Tucci, Henry D. Isenbero and Leslie Wise. Am. J. Surg., 1977, 133:285.

A retrospective study involving 239 patients who underwent cholecystectomy was conducted to determine wound infection rates as well as the probable source of infection.

The over-all wound infection rate in this group was 10.5 per cent. Those patients having acute cholecystitis had a 17 percent wound infection rate compared with 8.9 per cent in the group with chronic cholecystitis. Staphylococcus aureus was recovered in 76 per cent of the patients with chronic cholecystitis and 12 per cent of the patients with acute cholecystitis. Gram-negative rods were the more common organisms in the group with acute cholecystitis.

Bile cultures revealed organisms in 71 per cent of patients with acute cholecystitis and 60 per cent of patients with chronic cholecystitis. Eleven per cent of patients with positive bile cultures had wound infection compared with 7 per cent of patients with negative cultures.

There is a greater incidence of wound infection for acute cholecystitis than for chronic cholecystitis. Also, wound infection, especially after cholecystectomy for chronic cholecystitis, arises from bacteria originating from sites other than infected bile.

Gerald T. Ujiki

The Endoscopic Demonstration of Celiac Disease. F.M. Stevens and C.F. McCarthy. Endoscopy, 1976, 8:177.

The absence of small intestinal mucosal villi is not pathognomonic of celiac disease because this area responds to various damaging agents by villous atrophy. Nevertheless in a recent clinical trial, endoscopic examination with mucosal biopsy of the duodenal cap with an Olympus GIF panendoscope was performed in 11 untreated adult patients with celiac disease, four treated adult patients with celiac disease and 25 patients without celiac disease.

Celiac disease was confirmed in ten of the 11 untreated patients by duodenojejunal flexure suction biopsy. If villi were not seen on ordinary examination, dye scattering with indigo common dye was used, rapidly demonstrating the surface morphology within the duodenal cap. This villous atrophy established biopsy sites.

Because villous atrophy had been recorded in other disease states, a therapeutic clinical or histologic response to a gluten-free diet favoured the diagnosis of celiac disease. Further studies showing identical nature of the mucosal lesion in the duodenal cap and jejunum in untreated celiac disease are in preparation.

Lawrence P. Davis

Increased Blood Fibrinolytic Activity After Aspirin Ingestion. Leonard A. Moroz. N. Engl. J. Med., 1977, 296:525.

The effect of aspirin ingestion on fibrinolytic activity of whole blood and plasma occurring at blood levels encountered in clinical practice could be largely reproduced in whole blood by ingestion and in vitro addition of salicylate to which the ester is rapidly hydrolyzed after absorption. Four normal persons had 1.8 gm of aspirin increase 33 to 150 per cent at one to three hours of fibrinolytic activity of whole blood. Plasma salicylate levels were 5 to 8 mgm/100 ml. Sodium salicylate increased fibrinolytic activities of blood and of purified polymorphonuclear leukocytes in vitro, whereas aspirin had little effect.

These striking effects of aspirin on cellular and fluid phases of blood fibrinolysis are apparently distinct from known actions of aspirin on platelets. Although most recent studies show the effect of aspirin on venous thromboembolism and the arterial thrombosis function of platelet activity, prolongation of bleding by aspirin is also explained by a similar mechanism. The present observations indicate that the fibrinolytic mechanism should be considered as well, since the in vitro effects of salicylate and aspirin are discordant, suggesting that the fibrinolytic and platelet aggregation effects may be distinct. The effects of fibrinolysis described are also pertinent to the development of peptic ulceration. Deposition of fibrin, ostensibly providing a scaffolding for fibroblast and other repair mechanisms, is considered a fundamental feature of the response to tissue injury. The increase in activities capable of dissolving this matrix may contribute to the frequency and severity of this side-effect of aspirin therapy.

Further investigation into the relative roles of cellular and fluid phase elements either in normal or in physiologically or pathologically enhanced fibrinolysis has not been defined previously. Studies will obviously be required to determine the precise cellular and fluid components either separately or in concert responsible for the aspirin effect.

R. Douglas Rajko

Ten Years of Kidney Transplantation. F. Largiader. Zentralbl. Chir., 1976, 101: 1063.

Between 1964 and 1974, 267 kidney transplantations in 249 recipients were performed using cadaver kidneys exclusively. At the present time, 69 per cent of all patients are alive and 61 per cent of the transplanted kidneys are functioning. The one year survival rate for 100 consecutive primary transplants performed after January 1972 is 86 per cent for the patients and 73 per cent for the allografts.

One hundred and fifty-eight of 249 patients were male and 91 female. The oldest patient was 65 years of age, 12 patients were between six and 17 years of age. Two patients had diabetes mellitus with diabetic glomerulosclerosis. They received a pancreas transplant from the same donor at the time of kidney transplantation.

Immunosuppressive therapy consists of azothioprine and prednisone. Since 1969, all patients who were not sensitive to horse serum or horse protein received antihuman lymphocytic globulin intravenously during the first two to four weeks. Graft rejections were treated during the first six years by the application of increased doses of prednisone, intravenous injections of actinomycin C and local radiation to the transplanted kidney. During the last year, this regimen was changed to intravenous injections of one gram of prednisolone, radiation and, in selective instances, L-asparaginase.

Twelve patients had rupture of the transplanted kidney. None of these kidneys had to be removed, but all underwent surgical intervention. Eleven patients had stenosis of the distal ureter which was caused most often by impaired blood supply. Five patients sustained total necrosis of the transplanted ureter. Stenosis of the renal artery in six patients was probably caused by a lesion in the intima caused by the tip of the catheter during the hypothermic perfusion. These stenoses were repaired using a venous patch. Renal artery stenosis may cause hypertension but had no impact on the function of the transplanted kidney. Vascular complications in the form of renal artery or renal vein thrombosis occurred in three patients. A lymphocele developed in six patients. Lymphatic fluid usually collects in the area of the lower pole of the kidney and manifests itself by ureteral compression and impairment of renal function. Eight patients had acute pancreatitis, and two of them died. Four patients died of malignant lymphoma. Stress ulcer became a rare complication, since patients in whom there is the slightest suspicion that a gastric ulcer may develop undergo preliminary selective vagotomy and pyloroplasty.

The most common complication is the acute or late rejection of the allograft. Most rejections which lead to removal of the transplanted kidney occur within the first four months. About 2 per cent of kidneys will be lost per year because of later or chronic rejection.

The over-all results of kidney transplantation during the last years did not improve. The antilymphocyte globulin has some advantage in the treatment of rejections, but it is not a definite factor in the improvement of survival rates. The most important and significant improvement in renal transplantation is to come from developments in immunology.

Rudolf Nunnemann