Selected Abstracts

Accuracy of Angiography in the Diagnosis of Carcinoma of the Pancreas. U. Tylen. Acta Radiol., Diagn,. 1973, 14:449.

Early signs of carcinoma of the pancreas are absent or uncharacteristic, and as a result, the patients seek attention when the tumor is inoperable due to local or distant spread. Realizing the benefit of earlier diagnosis, the diagnostic accuracy of angiography in carcinoma of the pancreas is evaluated. In a 12 years. period, 134 possible instances of carcinoma of the pancreas were evaluated with celiac axis and superior mesenteric artery injections, 105 patients, or superior mesenteric: artery injection alone, four patients, or celiac axis injections only, 25. Of this group, 116 patients were proved to have carcinoma of the pancreas by postmortem examination in 48 patients surgical exploration in 66 patients, and biopsy alone in two patients. Eighteen patients did not have carcinoma of the pancreas.

Of the 116 patients with verified carcinoma of the pancreas, 79 patients were diagnosed cor-rectly prepperatively. In an additional 30 patients, a retrospective diagnosis of carcinoma of the pancrease was made. In the remaining seven patients with carcinoma, even retrospective evalua- tion could not make anangiographic positive; diagnosis.

The diagnosis of carcinoma of the pancreas was demonstrated by the irregular encasement of vessels or the presence of vessels in the tumor, or both. Thus, 109 of the 116 patients with positive diagnoses had encasement of large or small arteries, or both, with or without the demonstration of vessels in the tumor. Other vascular observations in the group of 116 patients were displacement of arteries, 31; tortuous arteries, 45; hypervascularization, 46; and venous lesions, including compression and occlusion, 57.

In the 30 patients in whom the retrospective diagnosis of carcinoma of the pancreas was made, changes characteristic of the disease were reported in nine patients but were attributed to benign diseases. Malignant changes, which were present but not observed, occurred in 17 patients. In four patients, poor technique led to an incorrect diagnosis.

In the seven patients in whom even a retrospective diagnosis of carcinoma could not be made, the diagnosis was pancreatitis in two patients and no abnormalities in five patients.

In 18 patients, an incorrect positive diagnosis was made preoperatively. In five patients, the incorrect positive diagnosis was made retrospectively. These falsepositive instances were often due to localized areas of pancreatitis.

Poor technical quality or insufficient knowledge of anatomic variation was responsible for many incorrect diagnoses. Furthermore, there is difficulty in distinguishing between carcinoma of the pancreas and pancreatitis. Patients in whom the lesions show up as small localized vascular changes are often difficult to diagnose correctly.

Simon Fink

Cholelithiasis and Dilatation of the Bile Ducts (Dilatation globale des voies biliaries et lithiase). B. Lesage, J.F. Carnot, D. Lallemand, and others. Ann. Pediat., 1973, 20:887.

An 11 year old patient who presented with biliary calculi of the gallbladder and dilated right hepatic ducts for which a cholecystectomy and a common bile duct exploration were done is reported. The patient returned three months later with abdominal pain and leukocytosis but with no fever or jaundice. At that time, a cholangiogram was taken intravenously and did not visualize the biliary passages; however, a repeat study two weeks later showed a large calculus of the common bile duct as well as the previously demonstrated calculi in the dilated right hepatic ducts. A Roux-en-Y choledocho-jejunostomy was carried out.

Investigations excluded hemolytic jaundice or stenosis of the common bile duct as etiologic factors, and biopsy of the liver results did not suggest congenital polycystic disease. The calculi removed at the second operation were of mixed cholesterol and bilirubin composition. The rarity of biliary calculi and particularly common biie duct stones in children is stressed.
M.M. Gazayerli

The Changing Etiology of Liver Abscess; Further Observations. Luis M. de la Maza, Faramarz Naeim, and Leonard D. Berman. J.A.M.A., 1974, 227:161.
The clinical and bacteriologic cause of 55 instances of liver abscesses proved at autopsy was reviewed. Organisms were considered significant if grown directly from the abscessed liver, from permortem peritoneal cavity cultures, from a premortem blood culture, or from more than one premortem and postmortem source. Seventy-three per cent of the patients received multiple antibiotics during their hospital stay.
Cholelithiasis or choledocholithiasis, or both, were present in 62 per cent of the patients. Acute appendicitis and amebic colitis, which were responsible for 35 per cent of the instances of liver abscess in a review from the same institution in 1934, were not responsible for liver abscess in any of the current patients.
Organisms thought to be etiologic were isolated in 89 per cent of the patients. Three-fourths of the cultures grew mixed flora in which Escherichia coli and other gram-negative aerobes predominated. Escherichia coli and Staphylococcus aureus were the organisms most often present in a pure culture An increase in gram-negative bacilli as etiologic. agents in liver abscess was noted to have occurred in the last 30 years.
Richard H. Bell, Jr.

A Fifteen-Year Experience with Automotive Hepatic Trauma. Charles F. Frey, M. Trollope, W. Harrster, and R. Snyder. J. Trauma, 1973, 13:1039.
The highest morbidity and mortality rates in abdominal trauma affecting solid viscera result from liver injuries. Between 1956 and 1970, 139 patients with blunt hepatic trauma resulting from automobile accidents were seen.
The mortality rate fell from 50 per cent to 16 per cent during three consecutive five year periods. Improved survival data correlated with reduction of the time interval between injury and surgical treatment, the introduction of abdominal lavage in place of abdominal taps during emergency evaluation, and the use of suture ligature, external drainage, and lobectomy with common duct drainage to control severe hemorrhage in place of packing.
The presence and severity of shock was releted to the extent of hepatic injury or severity of an associated injury. Salvageable patients with massive lacerations of the liver required early correction of hypovolemia. The most common associated injuries included fractures and splenic rupture. Among survivors, postoperative complications were pulmonary, fever of unknown origin, biliary fistula, and intra-abdominal abscess. In patients who died, exsanguination and renal failure also occurred.
The mortality rate from massive liver trauma was 56 per cent primarily from hemorrhage. The 7 per cent mortality rate among patients with less severe hepatic injury resulted from associated lethal injuries, including head injuries, pulmonary insufficiency, renal failure, and sepsis.
Robert A. Bush, Jr.

Cholesterol Gallstone Dissolution; Current Status. Johnson L. Thistle. Arch. Surg., 1973, 107:831.
In cholesterol gallstone disease, the concentration of bile acids and lecthini is insufficient to keep all of the cholesterol in solution. It is further characterized by the secretion of bile saturated or supersaturated with cholesterol. Attempts at medical dissolution of gallstones have been tried by many.
In this study, a controlled, randomized therapeutic trial of chenodesoxycholic acid, cholic acid, and

placebo among patients with asymptomatic radiolucent gallstones and roent-genographically visualized gallbladders was in-itiated. After treatment for six months or more, there was unequivocal decrease in stone size in 11 of 18 patients. Iris further stated that total stone dissolution occurred in three patients after one to two years of treatment. While this review is interesting, much work and follow-up study are necessary to accurately assess this modality.
Everett L. Dargan

Biliary Tract Abnormalities Associated with Duodenal Atresia. Ian S. Reid. Arch. Dis. Child., 1973, 48:952.
The enibryologic aspects of the duodenum and biliary .tract are reviewed, and nine instances of concurrent abnormalities are reported. Three patients had agenciesis of the gallbladder in association with duodenal atresia. The embryo-logic mechanism of this disorder is emphasized; An increased incidence of common duct abnormalities and narrowing in association with duodenal atresia is also underscored. The surgeon is cautioned against unnecessary dissection in the area of the common bile duct Jest postoperative edema cause complete obstruction of the already narrowed lumen in such patients.
Phillip P. Brown

Subcapsular Rupture of the Spleen and the Liver; the Value of Selective Angiography. Kaare Solheim and Knut Andreas Evensen. Acta Chir. Scand., 1973, 139:523.
Two patients with large subscapsular splenic and hepatic hematoma after blunt abdominal trauma with rather vague clinical symptoms and signs diagnosed by preoperative selective angiography are presented. Up to one-third of splenic ruptures are delayed ruptures that occurred two days or later after the accident, with a mortality rate of approximately 10 per cent. Angiography will accurately identify injuries to the spleen and virtually eliminate the problem of delayed rupture of this organ, whereas the clinical diagnosis of a subcapsular or intras-plenic hematoma as well as other types of splenic ruptures may be difficult.
In hepatic ruptures, approximately 30 per cent of the patients are normotensive and in a deceptively good condition on admission. Liver injuries may escape detection even at operation, especially if they are difficult to expose or if multiple injuries to other abdominal viscera are found. This is due to the fact that only 50 per cent of liver injuries still will be bleeding at operation. Selective celiacagraphy will be of extreme value and will give a diagnosis.
Both in splenic and hepatic subsapcular ruptures, selective angiography will show stretched arterial branches circumferential to a filling defect. In the parenchymal phase, it will disclose a large circular defect. The value of selective angiography in blunt abdominal injuries is stressed and should be performed at the earliest possible moment and at the slightest suspicion of injury.
You-Sah Kim