Selected Abstracts

Results of Portal Decompression in Patients with Primary Biiaiy Cirrhosis. R. Spinsi, G. Smith-Laing, 0. Epstein and S. Sherlock. Gut, 1981, 22 :345.
Portal Decompression may be the treatment of choice for patients with well compensated primary biiary cirrhosis who suffer recurrent variceal hemorrhage. Twenty-five patients with primary biiaiy cirrhosis who underwent portal decompression were studied at the Royal Free Hospital, London. The mean follow-up period was 51 months.
Five patients with decompensated cirrhosis died post-operatively. The over-all five year survival is 66 per cent. This is comparable with that for other forms of cirrhosis. None of the long term survivors, including three patients with a precirrhotic stage of primary biiary cirrhosis at the time of operation has significant portal systemic encephalopathy develop.
-F. Theodore Palm

The Seventies Evolution in Liver Surgery for Cancer. Joseph G. Fortner, Barbara J. Maclean, Dong K. Kim and others. Cancer, 1981, 47 :2162.
Four hundred and thirty-six patients with tumors of the liver underwent exploratory laparotomy at Memorial Sloan-Kettering Cancer Center. One hundred and eighty-six of these patients had ligation or cannulation of the hepatic artery, or both, or cannulation of the portal vein. Four patients had isolation chemotherapy perfusion of the liver. Eighty-four patients had biopsy of the liver only. One hundred and thirty patients underwent major resection of the liver: extended lobectomy in 36 patients, a lobectomy in 70 patients and a segmental resection in 31 patients. Seventeen additional patients underwent wedge resection.
Forty-eight per cent of the patients had Stage I disease, that is, tumor confined to the resected portion of the liver without involvement of vascular or biiary structures. Thirty-one patients had Stage II disease defined as regional spread of carcinoma to include vascular involvement, residual disease, direct extension into adjacent structures, bile duct involvement or tumor rupture. Seventy-two patients had distant metastases, Stage III disease.
The survival estimate at three years for those patients with Stage I disease was 85 per cent, with a five year survival in this group of 75 per cent. The three year survival for patients with Stage II and Stage III disease was 22 per cent. The survival of patients with metastatic Stage I carcinoma of the colon and rectum was 71 per cent at three years. Overall, the three years survival rate for the 101 patients who underwent major hepatic resection for carcinoma was 46 per cent. if the tumor was confined to the liver as in Stage I disease, there was a 78 per cent three year survival. The overall 30 day operative mortality in this series was 9 per cent. It is clear from the study that liver resection has become an increasingly safe procedure and that more and more patients are being given the opportunity for cure or worthwhile palliation by early aggressive operation for tumors of the liver.
-David P. Connolly

Hepatic Resection; Pillars of Success Built on the Foundation of 15 years of Experience. M. Balasegaram and Suresh K. Joishy. Am J. Surg., 1981, 141 : 360.
Two hundred and eighty-eight hepatic resections have been performed upon patients since 1964 at the General Hospital in Kuala Lumpur, Malaysia. The indications for hepatic resection are hepatic trauma, malignant tumors of the liver including hepatomas, solitary metastases to the liver and direct infiltration from a neighboring organ and non-malignant conditions, including liver abscesses, intrahepatic calculi, liver cysts and hemangiomas. Other indications are biiary atresia, tear of the

hepatic ducts and hepatic fistula.
The success of operation of the liver depends upon knowledge of hepatic anatomy and anomalies, diagnostic accuracy and assessment of the extent of disease, specially designed instruments for rapid resection and effective hemostasis. Experience at operation, a knowledge of the physiologic consequences and postoperative care are essential.
-E. Theodore Palm

Chemotherapy of Pancreatic Carcinoma. Steven E.Zimmerman, Frederick P. Smith and Phffip S. Schen. Cancer, 1981, Suppi., 47:1724.
At present, adenocarcinoma of the pancreas can be considered a fatal disease with 24,000 new patients per year. The authors estimate that only 10 to 15 per cent of patients have resectable tumors and that only 5 per cent of these favorable patients will survive five years. Single drug chemotherapy regimens and several combination regimens are discussed. One patient with biopsy proved hepatic metastasis demonstrated a complete response after eighteen months of treatment with the combination of Streptozotocin, mitomycin-C and 5-fluorouradil. This patient is still alive and free of disease five years after the initiation of chemotherapy.
Ten of 25 patients with measurable tumors, principally metastases to the liver which allowed for assessment of responsc were treated with a similar regimen substituting Adriamycin, doxorubicin hydrochloride, for the Streptozotocin. Ten of 25 patients obtained a partial response with a median survival of approximately one year. Another group has reported a similar result using a slightly different regimen.
-Lawrence M. Freeman

Ruptured Spleen-When to Operate? D. E. Wesson, R.M. Filler, S.H. Em and others. J. Fed iatr. Surg., 1981, 16:324.
Sixty-Three children with injuries to the spleen were treated during a five year period from 1974 to 1979. The decision to operate was based upon the clinical course of the patient and not on the presence of injury to the spleen alone. Abdominal taps and peritoneal lavage were found to be unnecessary in most patients since those patients who were stable on admission or after initial resuscitation were treated nonoperatively.
Forty-four patients were treated non-operatively. This consisted of strict bed rest, nasogastric suction and intravenously administered fluids, including blood as required. Sixteen of these 44 patients did require blood, mean 31.2 ±5.3 ml./kgm., but only three required greater than 40 ml./kgm. There was no evidence for delayed rupture of the spleen but a patient in the non-operative group had a large defect on the spleen scan three weeks post-injury. A healing laceration was found at operation. There were no other complications in the non-operative group of patients.
Nineteen children bled massively and all required operation within 16 hours of admission. All these patients required blood before operation, mean 80.4 ± 10.1 ml./kgm. and had a total blood requirement of 174.7 ± 23.3 ml./kgm. Fifteen patients in this group underwent total splenectomy, two partial splenectomy and one splenorrhaphy. One patient had been operated upon for an aortic laceration and had spontaneous cessation of splenic bleeding. Seven patients in the operated group of patients died: six from injuries to the head and one from bleeding.
Among patients whose hospital stay was not prolonged by associated injuries, the average length of hospitalization was 14 days in both groups. It is concluded that where adequate facilities exist, nonoperative treatment of injuries to the spleen is both safe and effective.
-Robert S. Rhodes

Prognosis After Splenectomy; a Review of 322 Cases. A.1.S. Macpherson. J.R. Coil. Surg. Edinb., 1981, 26:12.

Three hundred and twenty-two patients underwent splenectomy for conditions other than portal hypertension. Sixty were done for congenital spherocytosis, 37 for rupture of the spleen, 20 Hodgkin's lymphoma, hyperspienism, 49 and idiopathic thrombocytopenic purpura, 81 patients. The results of splenectomy are best when it removes a local source of blood cell destruction or sequestration and when the primary disease is thus rendered less harmful. This combination occurs in congenital spherocytosis.

In autoimmune hemolytic anemia, the results are less predictable, but chances of reducing the dose of corticosteroids to an acceptable non-toxic level are more than 60 percent. Once hypers. plenism becomes manifest, it can only be relieved by splenectomy. The prognosis for survival varies according to the underlying disease and may not be altered by splenectomy. Myelofibrosis and Felty's syndrome present difficult problems. The outlook for patients with myelofibrosis is not good. Surgical intervention should be done only when the disease is out of medical control. In some patients, splenectomy hastens the fatal outcome. In idiopathic thrombocytopenic purpura symptomatic improvement can be expected in 75 per cent of the patients.

There are risks associated with splenectomy, some are inherent to the primary disease, but careful selection and preparation of patients and avoidance of splenectomy in the young will go a long way to reduce risks and especially that of infection.

-John J. Hudock

Surgical Management of Pheochromocytoma. H. William Scott, Jr., Richard H. Dean, John A. Oates and others. Am. Surg., 1981, 47 : 8.

A 30 years experience of management of pheochromocytoma is described. The key points of confirmation of clinical diagnosis by direct measurement of elevated catecholamines in blood and urine are stressed. Localization can usually be achieved by noninvasive techniques of nephrotomography, ultrasonography or computerized tomography. However, the services of a skilled, experienced surgeon are recommended as an adjunct to the noninvasive investigations. Preoperative preparation with five to ten days of alpha blockade to overcome vasoconstriction caused by excess catecholamines is recommended, beta blockade only being added when persistent tachycardia or tachyarrhythmia occurs. In patients with profound hypertension or severe myocardial problems, metyrosine has been used with success.

Anesthesia requires fine judgement of catecholamine control and fluid volume support. The surgeon needs to carefully explore the paraspinal axis from diaphragm to pelvis and should control the blood supply to the tumor early to reduce hypertensive crisis. Forty-three patients were operated upon with one postoperative death, 2.3 per cent. Malignant conditions were observed in eight patients and seven patients were resected for cure who died from metastases occurring 2, 3, 5 and 9 years later. One patient is living at 15 years postoperatively and two are living with recurrent tumor. Primary resection provides a return to normotension in a majority of patients, but hypertension can recur while the patient has normal catecholamines. Medical supervision should be lifelong.

-Thomas S. Reeve

Biochemical Tests for Diagnosis of Phaechromocytoma; Urinary Versus Plasma Determinations. P.F. Plouin, J.M. Duclos, J. Menard and others. Br. Med. J., 1981, 282: 853.

Urinary and resting plasma catecholamine Concentration in 15 patients with pheochromocytoma were contrasted to determine their usefulness. Urinary catecholamines, particularly metanephrines, were high in over 95 per cent of patients. Similar findings were noted with plasma metanephrines in those patients with actively secreting tumors. However, patients who were normotensive at the time of sampling may demonstrate false-negative results. Urinary catecholamines appear to be more reliable than their plasma counter part.

-Albert Barrocas