Selected Abstracts

Sepsis in the Management of Complicated Biliary Disorders.
The incidence of sepsis in 25 patients with complicated biliary tract problems is presented. Eleven patients had benign biliary stricture; seven congenital biliary obstruction, and seven bile duct carcinoma. Seventy-two per cent of the patients developed one or more septic episodes following various bile duct reconstructive or decompressive procedures. Patients developing sepsis did not appear to be protected by prophylactic antibiotics. Bile duct carcinoma and bile duct stricture had a much higher incidence of septic complications. Septic complications necessitated a second surgical procedure in 31 per cent of patients who became septic. The authors caution that, in spite of advances in surgical technique and potent antibiotics, sepsis remains a frequent serious problem.

Ronald I. Holiday

Radiography in Primary Tumors of the Small Bowel.
In a series of 118 patients with tumors of the small intestine, the value of roentgeno-graphy was retrospectively evaluated in 63 patients who have been subjected to abdominal survey films, barium contrast examinations or angiography or both. Thirteen of 17 jejunal tumors, 76 per cent, and 19 of 46 ileal tumors, 41 per cent, were diagnosed preoperatively. Barium examination of the small intestine performed on 36 patients with no clinical or radio-graphic signs of obstruction disclosed 18 tumors, 50 per cent. When the small intestine examination was carried out during obstruction, seven of 21 tumors, 33 per cent, were diagnosed. Angio-graphy was performed in 32 patients, the majority of which had leiomyomas, nine patients, or carcinoids, 15. All leiomyomas were detected. In 4 patients, carcinoid angiography did not disclose the small intestine tumor, but in three of these the demonstration of metastases led to the correct diagnosis.

Peter E. Winter

Thirty-Year Experience with Surgical Interruption of the Inferior Vena Cava for Prevention of Pulmonary Embolism.
The Authors Report a retrospective study of 237 patients treated by inferior vena cava ligation. 154, suture plication, 27, or clip application, 56 Failure of anticoagulation or femoral vein ligation to control embolism and the threat of potentially massive, septic or paradoxical emboli were the indications for operation. Recent operative mortality was 2 per cent. Over-all hospital mortality was 15 per cent. Early postoperative leg swelling occurred in 36 per cent and late venous sequelae occurred in 50 per cent of the follow-up group of 140 patients studied for an average of 44 months. Although morbidity secondary to inferior vena cava interruption was decreased by the use of prophylactic clip, clip application was still associated with early leg swelling in 21 per cent and late mild swelling in 24 per cent. The incidence of proven or suspected recurrent emboli was 7.6 per cent with no significant variation by the type of inferior vena cava procedure. Recurrent emboli were fatal in 2.5 per cent. The authors maintain that there continues to be a group of patients who require inferior vena cava interruption to prevent pulmonary embolism. Except in instances of small septic or paradoxical emboli, nonocclusive methods are clearly preferred to minimize the incidence of late venous insufficiency syndromes. Open surgical techniques are preferred in all but severely ill patients in whom transvenous approach of femoral vein ligation should be utilized. Although the larger 28 mm. Mobin-Uddin umbrella and the Greenfield
device show promise in reducing complications associated with such devices, it is the authors' opinion that transvenous filters have not yet been proven superior to surgically applied vena cava clips with respect to leg sequels are recurrent embolism.

Allfin D. Rallow

Maternal and fetal effects of chronic administration of propranolol in doses of 10 to 240 mgm. daily were evaluated in ten patients and 12 pregnancies. In nine pregnancies, propranolol was used from the time of conception until the time of birth. In three pregnancies, propranolol was used for the last five to 18 weeks of gestation. Maternal indications included thyrotoxicosis, hypertension and cardiac arrhythmias. There were no adverse maternal effect.
The main fetal effect was suspected intrauterine growth retardation, occurring in six pregnancies. Three of these infants were quite small for gestational age, below the tenth percentile, and the largest infant of the other three patients was only in the fifteenth percentile. Of interest, several of the mothers also had other pregnancies during which they did not take propranolol. The infants produced from these drug-free pregnancies were, in every instance, larger than infants born after chronic propranolol administration. One mother had a larger baby on a reduced dose of propranolol. Propranolol has been shown to decrease umbilical artery blood flow in gestating ewes, and this may somehow correlate with the intrauterine growth retardation seen in human offspring whose mothers are on chronic propranolol therapy.

David B. Redwine

Early Carcinoma of the Ampulla and Papilla of Vater.
The clinical and radiological findings in 12 patients with early carcinoma of the ampulla of Vater are described. Endoscopic retrograde cholangiopancreatography, percutaneous transhepatic cholangiography and hypotonic duodenography are the most suitable techniques for making the diagnosis. An irregularly bordered obstructing mass in the ampulla or papilla is characteristic. An inflamed, rounded or prolapsed papilla or delayed efflux of contrast from the bile and pancreatic ducts together with local inflammatory changes in the pancreatic head are indirect signs of a tumor in this region. From the data presented, it would appear that endoscopic retrograde cholangiopancreatography was the most helpful diagnostic technique in these patients. Unfortunately, the authors do not discuss the value of ultrasound and computed tomography in these patients.

Samual f. Hessel

Critical Study of the Operation for Lymphedema (Etude critique de la chirurgie du Lymphoe deme).
Primary and secondary lymphedema both result from a mechanical insufficiency in drainage. A primary dilatation of the subfascial lymphatics has been demonstrated in previous studies of lymphedema. In patients with subfascial blockage of the drainage system, a progressive dilatation of both the deep and superficial systems has been observed Contrast medium will flow from the deep to the superficial lymphatics in these patients. Surgical methods of dealing with lymphatic drainage are evaluated in terms of their physiologic rationale. These methods include resection of epifascial tissue; drainage of the epifascial space by cutaneous flaps; drainage by omentum, as a flap or transplant; drainage with the aid of Cicks, and drainage by lymphovenous shunts. Tissue tonometry of an extremity to determiner early lymphatic compromise is adovcated in order to obtain optimum surgical results, especially if lymphovenous shunts are used.
Diana V. Fransworth

Sonographic Findings in Primary Carcinoma of the Gallbladder.
Albert H. Fink Radiology, Ha Yong Yum and 1980, 134:693
The sonographic appearance of four patients with primary carcinoma of the gallbladder is described. The earliest finding in carcinoma of the gallbladder was described to be irregular thickening of the gallbladder wall. This condition may be simulated by other benign processes such as cholecystitis and hypertrophic cholecystosis. Other associated findings described in patients with carcinoma of the gallbladder include fungating mass around the porta hepatis and cholelithiasis. The authors emphasize that sonography can provide critical diagnostic information in the detection of patients with carcinoma of the gallbladder, information which can not be obtained by other conventional procedures.

Arthur R. Fleischer

Adverse Reactions to Radiographic Contrast Material.
Contrast reactions are divided by these authors into three types: the vasomotor effect involving mild flushing, warmth, tingling sensation and a metallic taste or nausea; the immediate generalized reaction also termed anaphylactoid reaction or hypersensitivity reaction consisting of urticaria, pherhaps bronchospasm or laryngo-spasm, vasodilatation, hypotension and a compensatory tachycardia; and the vagus reaction in which the patient becomes apprehensive, restless, gradually obtund, sometimes looses sphincter control and may be apneic; hypotension and profound bradycardia develop. Bradycardia is the key finding. The first of these reactions is not serious. The second which has a higher incidence in those having a previous reaction may be pie-treated with steroids or benedryl. The third may be treated with atropine intravenously, which should be monitored by following the pulse rate.
A different classification was recently presented by Lal i. In his classification, a central role for central nervous system mechanisms was developed, with the most severe reactions attributed to the central mechanism perhaps related to abnormalities of the blood brain barrier. Furthermore, the use of and effectiveness of premedication was challenged.

Chris Kagan

Nephroplasty in the Management of Hydronephrosis.
Nephroplasty, the suturing of the upper and lower poles of the kidney together, was combined with pyeloplasty in 17 patients with hydronephrosis. In some patients, simple fixation of the poles was complimented by stitching a ribbon of fascia lata around the equator of the kidney. Nephroplasty allowed for reduction of intrarenal dilation of the collecting system. Because of vertical positioning of the kidney by the procedure, dependent drainage from the lower pole of calicerca ensured. There were no complications in this group of patients. The authors point out that these patients were all severely obstructed with marked intrarenal dilation.

Ronald W. Lew’s

Gentamicin variability in patients with compromised function has been long recognized, and formulations correlating gentamicin dose and renal function are available. Two hundred and forty-two surgical patients with normal renal function as defined by serum creatinine of 1.5 mgm. or less were studied. Using peak and trough levels, it was found that routine conventional dosages and dosage intervals resulted in subtherapeutic or potentially toxic levels in three of five patients studied. It is
suggested that variability occurs because gentamicin equilibrates in the extracellular fluid compartment. Various disease states in patients and their state of hydration result in alleviations of the extracellular fluid. The authors stress the individualization of dosage based upon monitoring of serum gentamicin levels and suggest that the same precautions be used when prescribing amikacin and tobramycin.

Ronald I. Holiday