SELECTED ABSTRACTS

Pages with reference to book, From 345 To 347

Current Role of Intravenous Cholangiography. Bethany Eubanks, Carlos R. Martinez, Denis Mehigan and John L. Cameron. Am. J Surg., 1982, 143: 731-733.

ONE HUNDRED consecutive intravenous cholangiograms of 91 patients at the Johns Hopkins Hospital between 1977 and 1979 were reviewed. Patients were examined using conventional techniques. Of 100 results, 40 were of no or limited value, 22 because of lack of visualization of the biliary tree and 18 because of faint visualization. Intravenous cholangiograms were helpful in making the diagnosis in only 17 of the 29 patients who eventually proved to have disease of the biiary tract, 59 per cent. The study was performed upon 20 patients to establish or rule out a diagnosis of acute cholecystitis; the results were helpful in only nine of these instances , 45 per cent.

One of the major difficulties was interpristion because of poor or only marginally satisfactory visualization which forced the radiologist to extend himself. In retrospect, 12 of the study results were originally misinterpreted.

Intravenous cho langiographic examination is not a harmless procedure; the reported mortality of those undergoing the procedure is one in 5,000 patients, as compared with a mortality of one in 4,000 patients undergoing intravenous pyelographic examination. In the past decade, sonography. computed tomography, percutaneous transhepatic and endoscopic retrograde cholangiography and cholescintigraphy have become available. These tests, when used appropriately, allow excellent visualization of the biliary tree and gallbladder. In most instances, they have rendered the intravenous cholangiogram a diagnostic anachronism.

In the view of the authors, the common indications for performing intravenous cho langio graphic procedures, as in their ten patients, are inappropriate. An intravenous cho langiographic procedure should be done only when other diagnostic tests fail or are not available.

Marco A. Amendola

Radiation Therapy Before Cystectomy in the Management of Patients with Bladder Cancer. M.A. Batata, F. C. H. Chu, B.S. Hilaris and others. Clin.Radiot, 1982,33: 109-114.

DURING the past two decades, 309 patients with carcinoma of the bladder were treated at the Memorial Sloan Kettering Cancer Center by one of three regimens of irradiation before undergoing systectomy. One hundred and four patients were given a radical tumor dose averaging 6,000 cGy (rads) in six weeks and underwent radical systectomy approximately one year later for persistent or recurrent cancer; 119 patients underwent preoperative irradiation to the pelvis,4,000 cGy in four weeks, followed by radical cystectomy after approximately six weeks, and 86 patients had preoperative irradiation to the pelvis, 2,000 cGy in one week, followed by radical cystectomy two days later.

The five year survival rates of the patients receiving each regimen were similar: 41, 43 and 42 per cent, respectively. The survival rates were higher for patients with clinically and pathologically low stage tumors and for those with his-to logically low grade tumors, and no significant differences between the patients receiving the different regimens were found. The recurrence rate was 21 per cent with stage reduction induced by irradiation and 51 per cent with no stage reduction. The planned preoperative irradiation appears to have more favorable results with the shorter 2,000 cGy regimen of high fractional doses than with the conventionally fractionated 4,000 cGy regimen, particularly in patients with high stage tumors. With prior irradiation, no comparable effect upon the frequency of extrapelvic metastasis; it developed with similar or higher frequency in patients with stage reduction. This result points to the inadequacy of local treatment alone for preventing spread of distant tumor and to the potential value of adjuvant chemotherapy or immunotherapy, or both, in reducing the incidence of subsequent distant

metastases in carcinoma of the bladder.
Peter F. Winter

Risks to Children from Computed Tomographic Scan Premedication. Allen A. Mitchell, Carol Louik, Peter Lacouture and others. J.A.M.A., 1982, 247: 2385.2388.
SERIOUS ADVERSE REACTIONS after preme dication for computed tomographic scans of the head were observed by the authors. Therefore, rates and risk factors for such reactions among 106 hospitalized children monitored by an intensive drug surveillance program were determined. Reactions occurred in 13 patients, including four instances of life-threatening cardiorespiratory depression or arrest after narcotic premedication. Other reactions included depression of the central nervous system, changes in behavior, voiding problems and vomiting. The risk of reaction was elevated in those patients who received high dosages of a premedication drug-relative risk, 5.2-and in those who received four or more premedication drugs-relative risk, 3.7. All life-threat-ening reactions occurred among infants younger than three months of age, and two of these reactions occurred after medication with morphine sulfate only, in the recommended dosage. Risks of adverse reactions from premedication should be considered by physicians who order computed tomographic scans for hospitalized children.
Shashikant M. Sane

Detection of Crohn's Disease by Ultrasound.Amnon Sonnenberg, Joachim Erck enbrecht, Peter Peter and Claus Niederau. Gastroenterology, 1982, 83: 430-434.
THE AUTHORS examined the sensitivity and specificity of the sonographic target pattern in the identification of patients with Crohn's disease. Fifty-one patients with Crohn's disease and 124 control patients were involved in this study. The sensitivity and specificity of the ultrasonic target appearance for Crohn's disease were 76 and 88 per cent, respectively. A target pattern consists of an echogenic center corresponding to the lumen of the intestine surrounded by a sonolucent rim. It was found that other disorders of the gastrointestinal tract, namely neoplasms, may also cause a target pattern. It is concluded that sonography can be useful as a complementary method to conventional series of the gastrointestinal tract with barium for the detection of Crohn's disease.
Arthur C. Fleischer

Ultrasound and Amniotic Fluid Aipha-Fetoprotein in the Prenatal Diagnosis of Spina BifidaLynn C. Allen, Terence A. Doran, Murray Miskin and others. Obstet. Gynecol., 1982, 60: 169-173.
ASSAYS of amniotic fluid aipha-fetoprotein were performed at 16 weeks gestation, and ultrasonographic examination was performed at 18 weeks gestation upon 376 patients who were at high risk for a neural tube defect. Two thousand four hundred and thirty-six patients at low risk underwent amniocentesis and ultra so nographic examination for other indications. Ten neural tube defects, seven open and three closed, were found in patients in the high risk group, and three all open, were found in patients in the low risk group. Two of the three closed defects were detected prenatally. The predictive value of an elevated alpha-fetoprotein level for an abnormal fetus was higher for patients in the high risk group than for those in the low risk group. When both the ultrasonographic results and the alphafetoprotein level were normal, the chance of a normal outcome was high for patients in both groups. In the low risk group, the likelihood for the women with levels and a normal of an abnormal outcome elevated aiphafetoprotein sonogram was low.
Mark L. Born

Reye's Syndrome and Medication Use. Thomas J. Halpin, Francis J. Holtzhauer, Robert J. Campbell and others. J.A.M.A., 1982, 248: 687-691.
A STUDY of 97 patients with Reye's syndrome and 156 control patients was undertaken to assess the effects of consumption of medications during illnesses antecedent to Reye's syndrome. Residents of

Ohio who had onset of Reye's syndrome between December 1978 and April 1980 were included in the study they had acute, noninflammatory encephalopathy demonstrated either by a cerebrospinal fluid level containing fewer than eight white blood cells/mm.' or by cerebral edema without perivascular or meningeal inflammation and associated with either microvesicular fatty metamorphosis of the liver or a threefold or greater rise in serum glutamicoxaloacetic transaminase, serum glutamic-pyruvic transaminase or ammonia; in addition, there could be no other reasonable explanation for the neurologic or hepatic abnormalities. A modified Lovejoy staging system was used to maintain uniform measurement of Reye's syndrome among participating medical centers. The disease of all 97 patients participating in the study was at least Stage I. For each patient in the study, two control patients matched for age, race, sex, classroom and type of antecedent illness were studied; for 38 study patients, only one control patient was found.

Of the 97 patients with Reye's syndrome, 57 per cent were female, 79 per cent were between ten and 14 years old, and 7 per cent were between 15 and 20 years old. The antecedent illness of 85 per cent of the patients was an acute infection of the upper respiratory tract, 10 per cent of the patients had chicken pox, and 5 per cent had other illnesses. A variety of medications, grouped into 97 different generic categories, were used by patients in both the study and the control groups; only ten of these medications were used by 20 per cent or more of the patients in both groups. All medications, however, were statistically tested for differences between study patients and control patients.

Only medications containing aspirin were used significantly more frequently by patients with Reye's syndrome, 97 per cent, than by control patients, 71 per cent, during the antecedent matched illness. Using a multiple logistic model to control for the presence of fever, headache and sore throat, the estimate of the relatjve risk for the development of Reye's syndrome with aspirin use was 11.5. In addition, although the prevalence of fever was significantly greater in study patients than in control patients, at each level of fever, the proportion of patients using aspirin was consistently higher. Conversely, significantly fewer study patients, 16 per cent, took medications containing acetaminophen than control patients. Fifteen per cent of the study patients and 14 per cent of the control patients received both aspirin and acetaminophen.

All ten of the study patients whose antecedent disease was chicken pox and seven of 13 matched control patients took medications containing aspirin. Ninety-seven per cent of the study patients and 72 per cent of the control patients who had infections of the upper respiratory tract took aspirin. Both aspirin and decreased liquid intake were independently significant factors. In 87 per cent of the study patients who received aspirin, the maximum daily dosage did not exceed recommended levels but did exceed the dosage of control patients who received aspirin. No relationship was found between the dosage and the stage of Reye's syndrome.

Judith S. de Nuno.