Selected Abstracts

Comparison of Radiotherapy Alone and Radiotherapy with Chemotherapy Using AdiEiamycin and 5-Fluorouracil in Bronchogenic Carcinoma. G. Anderson, T. J. Deeley, G. Smith and J. Jant. Thorax, 1981,36: 190.

EIGHTY-TWO PATIENTS WITH histologically proved carcinoma of the lung were randomly allocated to receive either radiotherapy alone, 2,400 to 3,200 rads, depending upon the cell type, or the same dose of radiotherapy followed by four cycles of Adriamycin, doxorubicin hydrochloride and 5-fluorouracil. Eighty-one patients were evaluated and for the group as a whole, survival was better in the group of patients who received adjuvant chemotherapy.

Cell type and extent of disease were considered in the randomization. The majority of the patients had squamous cell tumors. Survival was better in the group of patients who received adjuvant chemotherapy, particularly in the undifferentiated cell type group of patients. Prolongation of survival in patients with squamous tumors was not statistically significant. Side-effects occurred but were considered mild.

Jane W. Barry

Ultrasound in the Diagnosis of Maxillary and Frontal Sinusitis. Matti Revonta. Acta Otolaryngoi, 1980, Suppl. 370: 8.

A-MODE AND B-MODE ultrasound techniques were used for detection of maxillary and frontal sinusitis. A commercially available unit and a new echoscope developed in Finland were used. Scans in the sagittal and vertical planes were obtained using 3 to 6 MHz. transducers with diameters from 8 to 12 mm. The sinus was supposed to contain secretion if a back wall echo of the sinus was detected with ultrasound. Criteria of back wall echo are given.

The confidences of this ultrasonic method and roentgenography in the detection of secretion were tested in clinical series of maxillary and frontal sinuses by puncture and trephine findings. In a series of 170 maxillary sinuses of adults and 130 maxillary sinuses of children, statistical evaluation revealed the confidence and sensitivity of ultrasonography to be significantly better than of roentgenography. In a series of 100 frontal sinuses studied with roentgenography and ultrasonography the observed difference was not statistically significant.

Mucosal thickenings in maxillary sinuses caused ultrasonographically detectable changes, which were distinguishable from retained secretion. Small cysts and polyps were also distinguishable from retained free secretion, but large cysts and polyps caused ultrasonic findings similar to retained secretion. This was the most common cause of positive ultrasonic findings without retained secretion. The most common cause of a negative ultrasound in spite of retained secretion was the small amount of secretion which could not carry the ultrasonic beam to a perpendicular bony back wall surface.

Marco A. Amendola

Glycemic Control and Nerve Conduction Abnormalities in Non-Insulin-Dependent Diabetic SubJects. Ronald J. Graf, Jeffrey B. Halter, Michael A. Pfeifer and other. Ann. Intern. Med.,1981: 307.

VARIABLES OF glycemia and sensory and motor nerve donduction velocity were studied in 18 non-insulin dependent diabetic patients who were 23 to 75 years of age, before and after histitution of diabetes therapy. All patients mahifested fasting hyperglycemia and were free of disease of the kidney or a history Of chronic alcoholism. None were taking medication known to influence glucose homeostasis or nerve function. Median ahd sural sensory nerve conduction velocities were measured

bilateraly by conventional methods while median, peroneal and tibial motor nerve conduction velocities were measured bilateraly by a superimposed wave technique. Measurements of nerve conduction velocity, fasting plasma glucose and glycosylated hemoglobin were made before and at one, three six and 12 months after therapy. One patient was treated by diet alone, five were given oral hypoglycemic agents and 12 were treated with insulin.
Before therapy, the levels of fasting plasma glucose and glycosylated hemoglobin were increased while both motor and sensory nerve conduction velocity was slowed relative to control patients who were matched by age. After therapy most patients showed a significant reduction in fasting glucose and glycosylated hemoglobin levels at one, three, six and 12 months. Sustained normoglycemia was achieved in only two patients while fasting glucose levels increased in four patients. Sensory nerve conduction velocity was not altered by diabetes therapy while that of the median and tibial motor nerves was significantly increased. The nerve conduction velocity of the peroneal motor nerve was increased in 14 patients whose fasting glucose levels fell during therapy. Improved conduction velocities were apparent at one, three, six and 12 months for the median motor nerve, after six months for the tibial motor nerve and after three months for the peroneal nerve in the 14 patients with lowered fasting plasma glucose levels. In addition. there was a direct linear relation between change in fasting plasma glucose levels and peroneal and median motor nerve conduction velocity at three months. After 12 months of therapy, median motor nerve conduction velocity was related to both fasting plasma glucose and glycosylated hemoglobin levels. However, nerve conduction velocity was not restored to normal levels in most patients. The findings support a hypothesis that there is a metabolic component to diabetic neuropathy. Optimal glycemic control may be beneficial to patients with this disorder.
Judith S. de Nuno

Treatment of Advanced Cervical Cancer ByCombination of Bleomycin and Mitomycin-C.Hans-B. Krebs, Robert E. Girtanner, Staffan, R.B. Mordovist and others. Cancer, 1980, 46:2159.
FROM APRIL TO December 1978, 20 patients with recurrent or metastatic carcinoma of the cervix that had been documented at biopsy, cytologic examination or fine needle aspiration specimen were treated by a sequential combination of bleomycin and mitomycin-C. The drug schedule consisted of 5 mgm of bleomycin in 500 ml. of 5 per cent dextrose in water infused over 3 to 4 hours daily for seven days. On day 8, 10 mgm. of mitomycin-C was given intravenously over 10 to 20 minutes in 20 ml. of 20 per cent dextrose in water. Treatment was repeated after one week rest periods. Five courses of drug therapy completed the protocol; one patient had six courses. Therapy was discontinued if pulmonary toxicity developed in a patient. All patients had carcinoma of the cervix. All had recurrent or persistent disease following primary radiotherapy, 16 patients, or radical hysterectomy, four patients.
The patients received 2 to 6 mean 4.4, courses of chemotherapy. Complete remission was defined as a disappearance of all clinical evidence of tumor and partial remission was defined as a 50 per cent or greater decrease of tumor volume. Other responses were classified as no remission. The minimum duration of remission was three months. Eight patients, 40 per cent, showed clinical evidence of tumor remission. Of these, seven had a partial remission, 35 per cent and one, S per cent had a complete remission. The only patient with complete remission was still alive and without evidence of disease ten months after initiation of chemotherapy.
Mean survival time was 6.6 months for the nonresponding patients and eight months for the responding patients. The difference is not significant statistically. Drug toxicity was common. Two patients died of respiratory failure. Bleomycin and mitomycin-C may be effective in the treatment of advanced carcinoma of the cervix because of a response rate of 40 per cent and one complete remission. However, most of these responses were short, lasting only two to three months. The over-all failure rate was much higher than in another series which reported results of complete remission in 80 per cent of the patients. The only patient with complete remission had a small lesion of less than 2 cm. after radiation therapy for surgical treatment failure. Preferable action on squamous tissues makes bleomycin

an attractive agent for use in patients with carcinoma of the cervix. The combination with cis-dichioradianmineplatinum II appears promising and is currently under investigation.
Eluis S. Donaldson

Management of End Stage Polycystic Kidney l)tcease with Renal Transplantation.
WarrenPechan, Andrew G. Novick, William E. Braun and other. J. Urol., 1981, 125: 622.
END-STAGE kidney failure is a common sequela of polycystic kidney disease and has accounted for 5.5 per cent of alipatients with kidney diseases requiring transplantation. The management of patients with end-stage polycystic kidney disease is of particular interest because the patients usually present at an older age and are therefore at a higher risk. The results of treatment for end-stage polycystic kidney disease with both hemodialysis and transplantation have improved over the past few years.
Thirty kidney transplants have been accomplished in 25 patients with end-stage polycystic kidney disease at the Cleveland Clinic. All but two of the allografts were from culaver donors and the average follow up period was five years. The one and five year patient survival rates after transplantation were 76 percent and 50 per cent, respectively. The allografts survival rates were 63 per cent Rnd 39 per cent at the same intervals. Of 14 patients who were at risk for more than eight years, six still have well functioning allografts.
Nine patients underwent transplantation with both polycystic kidneys in situ with no adverse sequelae resulting from the retained native kidneys. Pretranspiant removal of native polycystic kidneys is reserved for patients who have experienced significant bleeding or upper urinary infection. Further benefits from retained polycystic kidneys in patients on dialysis include fluid allowances and higher hemoglobin levels. Despite the risk factors inherent in an older than normal population of cadaver allograft recipients, kidney transplantation is an excellent method for treating end-stage polycystic kidney disease and holds the prospect for long term allograft and patient survival rates.
Paul M. Jepson