
During a period of 20 months, 101 patients underwent gastroduodenal endoscopy for acute upper gastrointestinal tract hemorrhage. Of these, the study was performed within 48 hours in 77 patients, providing a positive diagnosis of the original lesion in 69 patients (90%). A positive diagnosis was established for only eight (33%) of the 24 patients studied later than 48 hours. Standard radiologic studies with barium indicated a possible cause for bleeding in only 38 (54%) of the 71 patients studied within 48 hours, but correctly identified the actual cause for hemorrhage in only 23 (32%). Endoscopy resulted in only one false positive diagnosis. A previous diagnosis or historical data suggested a cause for bleeding in 61 of the 101 patients, but was correct in only 35 (57%). Massive bleeding prevented endoscopy in two patients, and technical factors limited the examination in four.


Gastric irradiation plays a significant role in the treatment of complicated peptic ulcer disease. It should be used in conjunction with standard medical treatment and should not take the place of surgery, but rather should be applied to patients who are poor surgical risks because of advanced age or associated medical diseases.


Thirty-six elderly patients with complicated peptic ulcer were treated by gastric irradiation (2000 roentgens directed at the fundus). In 30 of the 36 cases there was a significant improvement in symptoms. A marked decrease of hydrochloric acid secretion was observed in the 15 tested before and after therapy. Gastric irradiation offers a safe means of treatment for complicated peptic ulcer in patients who, because of advanced age or associated disease, are poor surgical risks.
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Two distinct and separate patterns of epidermal cytoplasmic fluorescence were seen with indirect immunofluorescence on human normal skin cryostat sections. 1. *Upper epidermal cytoplasmic* (UEC). This fluorescence was seen only in the upper and middle epidermis. The epidermal cytoplasm fluoresced brightly except for that of the basal cell layer which was negative and contrasted sharply with the rest of the epidermal cytoplasm. No cytoplasmic fluorescence was seen in the dermis. This pattern was found with sera from patients with bullous and nonbullous diseases. 2. *General epidermal cytoplasmic* (GEC). This pattern differed from UEC in that the entire epidermis fluoresced equally intensely. Furthermore, strong cytoplasmic fluorescence was noted in the dermis. This pattern was seen in five patients with nonbullous diseases and in one patient with bullous pemphigoid. Cytoplasmic fluorescence was seen on human spleen touch imprints with sera producing both these patterns, but no cytoplasmic fluorescence occurred on human buffy coat peripheral blood smears.


It has been previously shown that angiotensin II is involved in the pathogenesis of severe hypertension resulting from ligation of the aorta between the origins of the renal arteries. To see if part of the effect of the angiotensin II was due to the stimulation of mineralocorticoid secretion, blood pressure and plasma renin activity were studied after ligation of the aorta in adrenalectomized rats receiving maintenance doses of steroids. Rats subjected to adrenalectomy and aortic coarctation developed hypertension as severe as that in rats with intact adrenal glands. Thus, an increase in the secretory rate of adrenal hormones is not a pathogenetic factor in the development of severe hypertension after aortic coarctation.


Penis tourniquet syndrome and amputation caused by strands of hair is reported. Successful repair of penile amputation for whatever cause has been rarely reported in the literature. All physicians should be cognizant of the existence of this type of trauma in pediatric patients and immediate attempts made to remove the encircling hair strands. If amputation of the penis has occurred, an attempt should be made to reconstruct the distal phallic shaft and urethra to obtain a viable complete phallus.


About two decades ago, several clinical investigators defined a cardiopulmonary syndrome seen in extremely obese individuals. C. Sidney Burwell and his colleagues etched this into medical memory by naming it the "Pickwickian syndrome," a charming sobriquet more justified by poetic license than by literary history. A 67-year-old man was 67 inches tall and weighed 351 pounds, his lowest recorded adult weight having been 265 pounds 16 years previously. The patient had pitting edema up to his lower chest. Blood pressure 140/90. The heart rhythm was grossly irregular with atrial fibrillation. His total vital capacity was 1600 cc. While breathing 100% oxygen, his arterial oxygen saturation was 51.8% and 63.4% on two determinations. Carbon dioxide tension was 70 mmHg and 74 mmHg and blood pH was 7.26. There was thus a moderately severe respiratory acidosis due to hypoventilation. Vigorous treatment of the congestive heart failure was unsuccessful. On the fifth hospital day he was found unconscious, and he expired shortly thereafter. Special cardiac examination demonstrated focal fibrosis and fat in the internodal pathway in the atrial septum. There
was extensive fatty replacement of sinus node. It is the impression that extensive fatty infiltration and fibrosis of the intracardiac conduction system contributed significantly to the morbidity and possibly the death of the patient.


The usual operation for correction of coarctation of the aorta is resection of the constricted segment and restoration of the continuity of the vessel by end-to-end anastomosis, occasionally with the insertion of a graft or prosthetic segment. The relatively long occlusion of the aorta does not produce ischemic damage to the spinal cord because of the almost inevitable presence of large collateral vessels. However, paraplegia following operations for coarctation of the aorta have been reported and it must be assumed that there is an occasional case in which the collateral circulation is not adequate to permit the standard procedure. Four such cases are reported. In an early case, resection of the coarctation was abandoned because of low pressure in the distal aorta after clamping and the diagnosis of pheochromocytoma was considered as a cause for the hypertension. The patient died of a complication following an operative exploration for a non-existent adrenal tumor. In a similar case, the coarctation was successfully excised after a shunt with a plastic tube was made between the subclavian artery and the distal aorta. An alternative to the by-pass with a plastic tube is left atrium to femoral by-pass with the pump. This was used successfully during an operation on a 15-year-old girl with hypoplasia of the aortic arch and coarctation, and in a case when it was necessary to do a second operation because of disruption of the anastomosis with false aneurysm, seven weeks after the original operation.


Key pecking by pigeons was reinforced with food under second-order schedules with fixed-ratio units. A constant total number of key pecks was required for reinforcement under each condition, but the size and, inversely, number of fixed-ratio components were varied. The total response requirement of 256 pecks was divided into fixed-ratio units of 128, 64, 32, 8, and 2 responses. A brief stimulus, which always preceded food reinforcement, was presented upon completion of each fixed-ratio unit. Under most conditions, the pattern of within-unit responding was typical of that under simple fixed-ratio schedules. Overall response rate was an inverted U-shaped function of component size. That is, response rates were highest under moderate sized units (fixed-ratio 128 and 64). This relationship is consistent with previous determinations of rate as a function of fixed-ratio value for simple fixed-ratio schedules.


Cefazolin, a new cephalosporin derivative, was studied in the treatment of 105 hospitalized patients with a variety of infections including endocarditis, pneumonia, and urinary and soft tissue infections, and was found to be effective in 104 patients. Cefazolin was also tested in vitro and shown to be effective against staphylococci, pneumococci, *Escherichia coli*, *Klebsiella* sp., and *Proteus mirabilis* by agar dilution method. It was shown to produce high serum levels when administered in a 250- to 1,000-mg intramuscular dose and was well tolerated and free from renal toxicity. Comparison of the results of this study with those from our prior studies on cephaloridine revealed equivalent antibiotic potency, good tolerance to both the agents when given intramuscularly, superior, average blood levels with cefazolin, equal clinical efficacy, and absence of renal toxicity with cefazolin (unlike cephaloridine). Similarly, the results of treatment of pneumococcal pneumonia with intramuscular cefazolin were found to be superior to those for oral cephalixin.
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Out of 195 patients with acute myocardial infarction, 22 (11.3%) developed a pericardial friction rub. The diagnosis of the postmyocardial infarction syndrome was made in none of these. The course of the 22 patients with pericarditis was compared with that of a consecutive series of 50 patients without pericarditis. As a group, those with pericarditis had a greater rise in SGOT and higher incidence of arrhythmias and heart block, cardiac failure, and cardiogenic shock. A greater number had high ESR and abnormal chest films. All these differences were significant, but there was no significant difference in the mortality between the two groups. The complications were attributed not to the pericarditis, but to the extensive myocardial damage. Two patients with pericarditis who had been given anticoagulants developed hemopericardium which probably contributed to their death. It is concluded that (a) though pericarditis is indicative of severe myocardial infarction, it does not increase the mortality; (b) a friction rub persisting for 3 days or more should be considered as a bad prognostic sign; and (c) in the presence of pericarditis in very ill patients with extensive infarction, anticoagulants should be discontinued since there might be a danger of hemopericardium.


Eleven severely hypertensive patients, median age 54 years, were treated with intravenous clonidine hydrochloride (Catapres). In nine there were life-threatening complications: severe left ventricular failure (LVF), hypertensive encephalopathy, cerebral hemorrhage, dissecting aortic aneurysm, renal failure, and severe epistaxis. In two patients there was pronounced, but uncomplicated, elevation of blood pressure. 0.15 mg or 0.3 mg clonidine was given every 40 min. with electrocardiographic (ECG) monitoring. The mean systolic and diastolic blood pressures in the eleven patients were respectively 266 and 165 mmHg before treatment, falling to 165 and 109 mmHg after treatment (P < 0.001). The mean decrease in heart rate was 26 beats/min. (P < 0.001). Doses of clonidine required for control ranged from 0.15 mg (one ampule) to 0.9 mg (mean 0.56 mg), although one patient received a total of 0.9 mg without an adequate response. The presenting condition caused the eventual death of two patients. There were no serious side effects, except for one transient episode of sino-atrial heart block. It is concluded that clonidine is effective and safe in the treatment of hypertensive emergencies.


Under the aegis of the Cooperative Breast Cancer Group, 13 principal investigators studied a total of 218 female patients with metastatic carcinoma of the breast. All patients either were menstruating actively or were less than one year past the menopause; all had histologic proof of breast cancer and progression of tumor documented either by physical examination or by roentgenograms. Both incidence of remission and survival time were compared between patients treated either by surgical castration or by surgical castration plus thyroid substance. The incidence of remission was 27.5% for the control group and 25.7% for the group treated with thyroid substance; the survival time for the two groups was identical, with 50% surviving 30 months or longer. We conclude that the effects of surgical castration were not enhanced by the addition of thyroid substance.

Autogenous vein transplants used as arterial substitutes in the femoro-popliteal and femoro-infrapopliteal regions have shown excellent tissue acceptance, and the femoropopliteal grafts yield good functional results. After 5 years of observation, 64%, and after 10 years of observation, 44% of the femoro-popliteal grafts appear structurally sound and functionally unimpaired. Structural defects develop in 32.7% of the grafts as the result of technical mishaps (stenosis due to improper suturing and to instrumental trauma) and due to intrinsic tissue changes (subendothelial hypertrophy, layering of intimal thrombi, fibrosis of venous valves, and atherosclerosis). All of these changes are progressive and may lead to the loss of patency of the graft. Some of these can be avoided by greater care in technique and others can be corrected if discovered early. Atherosclerosis and intimal thickening (ie, subendothelial hypertrophy and fibrin layering) are not remediable and will continue to be a major cause of loss of graft function.


Metastatic renal carcinoma remains unresponsive to single cancer chemotherapeutic agents or to combinations of agents. Personal experience at Henry Ford Hospital and an extensive review of literature failed to find either a single agent or a combination of agents capable of producing consistent response rates. This current study is an extension of one reported originally in 1969, and presents results in an additional 45 patients; a total of 117 patients have been treated for adenocarcinoma of the kidney in the past ten years at this institution. All patients received a progestational agent as initial therapy, usually medroxy progesterone acetate (Depo-Provera). If patients failed to respond to progestational hormonal therapy, they were then treated either with fluoroxymesterone, testosterone propionate, or testosterone cyclopentyl propionate. When they failed to respond either to progestins or androgens, they were then treated with a variety of chemotherapeutic agents. Single available agents used included (a) a variety of alkylating agents — no response in 22 patients; (b) antimetabolites, including 5-fluorouracil, hydroxyurea, methotrexate, 6-mercaptopurine, and cytosine arabinoside — no significant response in 31 patients; (c) the antibiotics, including actinomycin D, mithramycin, adriamycin, and others — no response in 20 patients; (d) the periwinkle alkaloid antimitotic, vincleuksblistine — 2 objective regressions in 15 patients. Nine patients were treated with newer investigative agents with equally unrewarding results, three patients were treated with dimethyl imidazole carboxamide, three were treated with adriamycin, and three were treated with 5-azacytidine. No responses were observed in 10 patients treated with nitrosoureas. A review of the literature yields only occasional well-documented objective remissions with a variety of agents, primarily cyclophosphamide (Cytoxan) and hydroxyurea (Hydrea).


A comparative clinical trial to investigate the relative efficacy and dose-response of two androgens in the treatment of metastatic breast cancer was conducted by The Cooperative Breast Cancer Group. The two androgens studied were dromostanolone propionate at 100 mg and 200 mg three times weekly and 7α-methyl-19-nortestosterone acetate at 10 mg, 33 mg, and 100 mg weekly. The latter compound is a much more potent androgen and the hypothesis to be tested was whether or not a much more potent androgen could induce a greater incidence of regressions. Rates of regression were: dromostanolone propionate at 100 mg, 22%, at 200 mg, 16% (the p value for the difference is 0.325); the
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more potent androgen, \(7\alpha\)-methyl-19-nortestosterone, at 10 mg, 15% at 3 mg, 22% and at 100 mg, 28% (the difference between the lowest and highest dose-response rates being 0.05%). This study suggests that at least a log dose increase of a potent androgen is required to obtain an increased objective remission rate, whereas a one-tenth of a log dose increase of a weaker androgen is not associated with an increased response rate. No difference in total survival was observed between any of the treatment groups, but patients who had regressions had longer median survival than those who were classified as failures to therapy.


Adults with acute leukemia were randomized between two schedules of cytarabine administered by continuous intravenous infusion: schedule 1, 800 mg/sq m for 48 hours; schedule 2, 1,000 mg/sq m for 120 hours. The duration of infusion time remained constant for each patient, although the total dose during subsequent courses was modified depending on the severity of myelosuppression. Courses were repeated for a minimum of three courses at 14-day intervals until remission or treatment failure. Response rate was 20% for schedule 1 and 38% for schedule 2 (P<.05), showing that response rate to cytarabine is related to schedule of administration. Median duration of complete remissions was 62 weeks for schedule 1 and 51 weeks for schedule 2. Twenty-three percent of patients who achieved complete remissions had remissions lasting more than two years; 21% are still in remission.


A 79-year-old man, with known lymphocytic lymphosarcoma of several years' duration, developed repeated brief episodes of fever, epigastric pain, nausea, vomiting, and jaundice. The gallbladder removed at surgery contained numerous small stones, and its wall was diffusely infiltrated by lymphosarcoma. This case represents the first antemortem diagnosis of lymphosarcoma of the gallbladder, and emphasizes that the less aggressive type of lymphoma may be managed successfully by surgery, when resectable organs are involved.


Five prepubertal growth hormone-deficient children were treated with oxandrolone (0.1 mg/kg/day) and human growth hormone (HGH) 2 mg three times weekly alone and in combination. Average nitrogen retained (mg/kg/day) was calculated from 9-day balance data obtained at the beginning and end of each six-month treatment period. Oxandrolone increased the range of nitrogen retention from control values of 2.5-39 to 20.4-107.1, which was statistically significant. Persistently increased nitrogen retention was demonstrable at the end of six months of oxandrolone therapy. Addition of HGH further enhanced the anabolic effect (67.7-139.3), which also was statistically significant and persistent to the end of six months of combination therapy (57.4-114.3). Despite continued HGH treatment, withdrawal of oxandrolone was associated with a drop to pretreatment values by the end of six months (0.6-38.4). Oxandrolone and HGH have synergistic anabolic effects which probably involve different mechanisms. During some balance periods, nitrogen retention was calculated by determination of \(^{15}N\) excretion after oral administration of labeled glycine. Results were similar but lacked statistical significance. The smallest increment in height for one-year advancement in bone age while receiving oxandrolone was 2.17 inches.
Granular Cell Myoblastoma of the Larynx
Kamil Muzaffar, MD; Iftikhar Salahuddin, MD; Fred Averbuch, MD and Richard D. Nichols, MD

Professional Standards Review Organization: Past, Present and Future
Robert M. O'Bryan, MD

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G. R. Rubio, MD; Lester Weiss, MD; J. F. Nunez, MD and M. Saeed uz Zafar, MD

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Marvin D. Anderson, MD and Herbert S. Rosenkranz, MD

Laurence Sidney Fallis, M.D., 1894-1974
Conrad R. Lam, MD

Publications of the Staff — Titles and Selected Abstracts