

## Selected Abstracts

Pages with reference to book, From 236 To 238

Vascular Trauma in Infants and Children D.P. Meagher, Jr. et al (1200 Moursund Ave, Houston, TX 77030) *J Trauma* 19:532-536 (July) 1979.

A 20-year retrospective evaluation of vascular trauma in infants and children included 53 cases of blunt and penetrating vascular injuries. There were 36 boys and 17 girls ranging in age from 24 days to 14 years (average, 10 years). The most frequently encountered sites of arterial trauma were the brachial or superficial femoral artery, and of venous trauma the inferior vena cava. Any patient who had an injury in proximity to a major vessel, hematoma formation, audible bruit, or palpable thrill underwent prompt arteriography or immediate operative exploration of the injury site. All patients were managed operatively. There were 41 major arterial and 32 major venous injuries. No patient required a major amputation. Most injuries were repaired by primary closure or segmental resection and end-to-end anastomosis; interposition vein grafts and substitute conduits were used in four patients with more extensive injuries. A 13% operative mortality was encountered: the most frequent cause of death was intraoperative exsanguinating hemorrhage.

Cimetidine and Gastric Ulcer Healing. K.D. Landecker et al (Royal North Shore Hosp, St Leonards, NSW, Australia) *Med J Aust* 2:43-45 (July 14) 1979.

The effect of cimetidine in the daily dose of 1,200 mg on the healing rate of chronic gastric ulcer was assessed in a randomized double-blind trial in 48 patients. Cimetidine was found to accelerate the healing of chronic gastric ulcers in the ambulant patients, but it conferred no additional benefit on the hospitalized patients. No significant side effects were observed.

Low-dosage Clonidine (Dixarit) in Menopausal Flushing. J. Evans and J. Hailes (Royal Women's Hosp. Melbourne, Victoria, Australia) *Med J Aust* 2:45-46 (July 14) 1979.

In an open evaluation of low-dose clonidine therapy in 20 patients with symptoms of menopausal flushing, 12 of 17 patients who completed the 12-week trial noted an improvement in their condition; this improvement was marked in eight patients. The greatest improvement was noted in the perimenopausal group of women whose dose requirement was 25 µg three times a day. Postmenopausal women tended to be more refractory to the therapy and required larger doses for the relief of symptoms.

Successful Treatment of Ergotamine Poisoning With Sodium Nitroprusside. G.A. Skowronski et al (Prince Henry's Hosp, Melbourne, Victoria, Australia) *Med J Aust* 2:8-9 (July 14) 1979.

Vascular effects of ergot toxicity consist of arteriospasm, usually affecting the legs more than the arms. The distribution is often asymmetrical, and claudicatory symptoms or gangrene may result. The blood pressure is usually elevated, and ischemic changes may appear in the ECG. A case of ergotamine overdose that produced vascular insufficiency is described. The 26-year-old woman was treated successfully with the intravenous infusions of sodium nitroprusside and low-molecular-weight dextran, and anticoagulation with heparin. Sodium nitroprusside may be the drug of first choice for this condition.

Evidence for an Aetiological Role for Adenovirus Type 7 in the Mesenteric Adenitis Syndrome. R.L. Prince (Princess Margaret Hosp for Children, Perth, WA, Australia) *Med J Aust* 2:56-57 (July 28) 1979.

Previous research established the relationship between viral infection with adenovirus, influenza B virus, and Coxsackie 13 virus, and mesenteric adenitis. A prospective controlled survey of the incidence of viral infection in mesenteric adenitis was undertaken in children attending a children's hospital over a period of 13 months. In 18 patients and 18 controls who were matched for age, sex, and date of presentation, there were five cases of adenovirus type 7 infection in the mesenteric adenitis group and none in the control group. The clinical problem at presentation is in differentiating

mesenteric adenitis from appendicitis. If further work shows that viral infection is indeed more common in mesenteric adenitis and is limited to a narrow range of viruses, then rapid identification of these viruses in children with "acute abdomens" would be a valuable aid to differential diagnosis.

Cimetidine in the Treatment of Reflux Oesophagitis. P. Brown(Middlemore Hosp, Auckland, New Zealand) *Med J Aust* 2: 96-97 (July 28) 1979.

Twenty-two adult patients with active endo-scopically proven reflux esophagitis entered a double-blind trial of treatment with either cimetidine (1 g day) or placebo. A second endoscopy was carried out eight weeks after the beginning of treatment on 19 patients. The mucosa appeared macroscopically normal at eight weeks in 81.8% of the cimetidine-treated patients, while 90% of patients were described histologically as having a normal or unremarkable mucosa. The results in placebo-treated patients were 55.6 and 44.4%, respectively. The cimetidine-treated patients consumed significantly less antacids than the placebo-treated patients, and the overall assessment of their well being was significantly better (90.9% patient satisfaction with treatment in the cimetidine group compared with 18.2% in the placebo group). Two patients in the placebo group did not complete the trial owing to continuing severity of their symptoms, while none in the cimetidine group felt that their condition had remained static or was worse.

Exercise Stress Testing. D.A. Weiner et al. (T.J. Ryan, Cardiology Dept, University Hosp. Boston, MA 02118) *N Engl J Med* 301:230-235 (Aug 2) 1979.

To determine to what extent the diagnostic accuracy of stress testing is influenced by the prevalence of coronary artery disease, the authors correlated the description of chest pain, the result of stress testing, and the results of coronary arteriography in 1,465 men and 580 women from a multicentered clinical trial. The pre-test risk (prevalence of coronary artery disease) varied from 7% to 87%, depending on sex and classification of chest pain. A positive stress test increased the pretest risk by only 6% to 20%, whereas a negative test decreased the risk by only 2% to 28%. Although the percentage of false-positive results differed between men and women ( $12 \pm 1\%$  vs  $53 \pm 3\%$ ), this difference was not seen in a subgroup matched for prevalence of coronary artery disease. The ability of stress testing to predict coronary artery disease is limited in a heterogeneous population in which the prevalence of disease can be estimated through classification of chest pain and the sex of the patient.

Comparative Effects of Ticrynafen and Hydrochlorothiazide in the Treatment of Hypertension.

Veterans Administration Cooperative Study Group on Antihypertensive Agents (E.D. Freis, Veterans Administration Medical Center, Washington, DC 20422) *N Engl J Med* 301:293-297 (Aug 9) 1979.

Two dose levels of ticrynafen, a new uricosuric diuretic, and of hydrochlorothiazide were randomly assigned, double-blind, to 240 men with initial diastolic blood pressures in the range of 95 to 114 mm Hg. A dose of 500 mg of ticrynafen once daily exerted an antihypertensive effect comparable to that of 50 or 100 mg of hydrochlorothiazide. Whereas serum uric acid levels rose in patients treated with hydrochlorothiazide, they fell markedly in those receiving ticrynafen. Otherwise, both diuretics produced similar chemical changes in serum. Patients tolerated ticrynafen as well as they did hydrochlorothiazide over a period of six months of observation, and there was no evidence of serious toxicity or loss of therapeutic effect with ticrynafen. This antihypertensive agent, in appropriate doses, appears to be as effective and well tolerated as hydrochlorothiazide, and in addition ticrynafen prevents hyperuricemia.

Role of Adrenergic Nerves in Blood-induced Cerebral Vasospasm. F.A. Simeone et al. (Univ of Pennsylvania School of Medicine, Philadelphia, PA 19174) *Stroke* 10:375-380 (July-Aug) 1979.

Cerebral arteries have an abundant supply of adrenergic nerve fibers that are believed to release vasoactive substances responsible for the induction of cerebral vasospasm. To assess the importance of adrenergic nerves in this phenomenon, high doses (600 ug/mL) of 6-hydroxydopamine (6-OHDA) were used to produce in vitro chemical sympathectomy in bovine middle cerebral artery. The 6-OHDA reduced catecholamine fluorescence to undetectable limits. The H<sup>3</sup>-norepinephrine uptake was reduced to 1.5% of intact controls. Arterial norepinephrine content was reduced by 92%. Contractile

responses to norepinephrine, serotonin, and fresh human whole blood were modestly reduced after denervation. This reduction was probably due to alpha receptor inactivation by 6-OHDA, because after protection of the alpha receptors with phentolamine the vessel response was the same as in untreated controls. Contractions in response to aged human whole blood were not affected by denervation. The results suggest that the endogenous release of catecholamines does not play a major role in the initiation or spread of blood-induced vasospasm in large cerebral arteries.

Ineffectiveness of the Doppler Ophthalmic-Test (DOT) in Post-endarterectomy Evaluation. S.M. Otis et al. (Scripps Clinic, La Jolia, CA 92037) Stroke 10: 396-399 (July-Aug) 1979.

To evaluate the effectiveness of the Doppler Ophthalmic Test (DOT) following carotid endarterectomy, a large group of patients was examined both preoperatively and postoperatively with noninvasive techniques. The DOT, a useful noninvasive diagnostic test for the determination of significant carotid artery stenosis, was found to be persistently abnormal in 46% of patients with a preoperative positive test. This occurred in spite of the fact that operative arteriography, direct ultrasonic auscultation, and Doppler imaging studies were all within normal limits. This study suggests that the DOT alone is not adequate to follow up patients postoperatively, especially if an abnormal study persists following a satisfactory endarterectomy. Other noninvasive techniques that use direct ultrasonic imaging of the carotid flow may be more accurate in determining vessel patency.