

## Review of the Journals

The editors would like to thank:

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A panel of regular contributors is being established who will cover the major journals and specialities. Suggestions or reviews of articles may be submitted by anyone at anytime to:

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### Cardiology

#### Coarctation of the Aorta: Long-Term Follow-Up and Prediction of Outcome After Surgical Correction

Cohen, M., Fuster, V., Steele, PM., Driscoll, D., and Mc Goon, DC., *Circulation* 1989; 80 840-845

The long term clinical course was studied in 646 patients who underwent isolated operative repair of coarctation of the aorta at the Mayo Clinic from 1946-1981. The study has the largest population undergoing repair of coarctation with a median followup of as long as twenty years. Four main points emerge: 1) Age at the time of initial repair is the most important predictor of long term survival (91% 20 year survival if repair before age 14; 79% after, with best results at age 9 or less); 2) Coronary artery disease is the most common cause of late death; 3) Age at the time of initial repair is the most important predictor of hypertension; 4) Associated cardiovascular anomalies requiring subsequent surgery are common. This is an excellent review and a "must" for any library file on this disease.

#### Dyslipidemias with Desirable Plasma Total Cholesterol Levels and Angiographically Demonstrated Coronary Artery Disease

Miller, M. Mead LA, Kwiterovich Jr, PO., and Pearson TA., *American Journal of Cardiology*, 1990; 65:1-5

To examine dyslipidemias in a population with desirable cholesterol levels, the authors evaluated 1,000 patients undergoing diagnostic coronary angiography. Of 288 patients with "desirable" cholesterol levels (defined by these authors as less than or equal to 200 mg/dl), approximately 67% of men with angiographically demonstrated coronary artery disease and 80% of women with CAD had low levels of high density lipoprotein cholesterol (35 mg/dl). Multiple logistic regression analysis revealed that high density lipoprotein cholesterol in men and very low density lipoprotein in women were associated with CAD after adjustment for other risk factors. These results suggest that all CAD patients should be screened for dyslipidemias, regardless of the plasma or serum total cholesterol level, as there will be significant results in many unsuspected cases.

#### Short-Term Outcome and Long-Term Follow-Up Following Coronary Angioplasty in the Young Patient: An 8-Year Experience

Stone, GW., Ligon, RW., Rutherford, BD., Mc Conahay, DR., Hartzler, GO., *American Heart Journal* 1989; 118:5:873-877

89 separate PTCA procedures from a total of 8,000 consecutive PTCA's were performed (1.1%) and analyzed in 71 patients less than or equal to 35 years of age. Multivessel disease was present in 41 patients (58%). Eleven procedures (12.4%) were done for acute myocardial infarction. Of 253 lesions attempted, 242 (95.6%) were successfully dilated. At a mean follow-up of 32 months, 50 patients (72.5%) were asymptomatic. Late events consisted of one death, four nonfatal infarctions (5.8%) and seven bypass surgeries (10.1%). Seventeen patients (24.6%) required 25 repeat PTCAs: restenosis was present in 12 of these patients while progression of native disease was noted in nine patients. Though the 3 year survival was excellent in this study, a significant proportion of these patients develop nonfatal infarction or require repeat PTCA or bypass surgery, often for progression of native disease in addition to restenosis.

#### "Recovery Only" ST-Segment Depression and the Predictive Accuracy of the Exercise Test

Lachterman, B., Lehmann, KG., Abrahamson, D., and Frelcher, VF., *Annals of Internal Medicine* 1990;112:11-16

The authors evaluated data from retrospective analysis of 328 male patients who had had both a sign or symptom limited treadmill test and coronary angiography. Of the 168 patients who had abnormal ST-segment responses, 26 had such only during recovery. The positive predictive value of this pattern for significant angiographic disease (84%) was not statistically different from the predictive value of ST depression during exercise (87%). Inclusion of ST depression during recovery significantly increased the sensitivity of the exercise test from 50% to 59% ( $p = 0.01$ ) without a change in predictive value. In this study the occurrence of ST-segment depression during the recovery period only did not generally represent a "false-positive" response. The inclusion of findings from this period increased the diagnostic yield of the exercise test.

#### Decline in the Risk of Myocardial Infarction Among Women Who Stop Smoking

Rosenberg, L., Palmer, JR. and Shapiro, S. *New England Journal of Medicine* 1990 322: 213-7

In this study, the smoking habits of 910 patients who had their first myocardial infarction were compared with 2375 controls in a hospital-based case-control study of women from 25 to 64 years of age. The data obtained suggest that in women, relative to studies in men, the increase in the risk of a first myocardial infarction among cigarette smokers declines soon after the cessation of smoking and is largely dissipated after two or three years. The same pattern of decline was apparent

regardless of the amount smoked, duration of smoking, the age of the women, or the presence of other predisposing factors.

## Epidemiology

### Why are the Japanese living longer?

Marmot MG, Smith, GD *Br Med J* 1989; 299: 1547-1551

In the past 20 years Japan has achieved the longest life expectancy in the world, concurrent with a very striking improvement over the last thirty years. The authors in this article obtained data on the recent fall in mortality in Japan and investigated some of the reasons that might be behind it. While many of the conclusions the authors reach are somewhat speculative in nature, the article draws interesting thoughts toward social and health policy in general, particularly with respect to Great Britain.

## Hematology

### Survival and Causes of Death in Hemochromatosis

Strohmeyer, G., Niederau, C. and Stremmel, W. *Annals New York Academy of Sciences*, 1988 Vol 526, 245-257

The above is an excellent review of hemochromatosis as a disease entity and detailed observations and events in 163 followed patients. It covers types and degrees of disease, and characteristics and survival/prognosis for each group followed. An extensive bibliography provides other references that are quite useful.

## Immunology

### Human Immunodeficiency Virus Type 1 (HIV-1) Infection a Median of 18 Months before a Diagnostic Western Blot

Wolinsky, SM., Rinaldo, CR., Kwok, S., Sninsky, JJ., et al. *Annals of Internal Medicine* 1989; 111:961-972

Coded clinical samples were evaluated from a cohort of homosexual men using two enzyme-linked immunosorbent assays (whole virus and gp 120-gp 41 fragment), western blot, a p24 antigen capture assay, virus cocultivation, and in-vitro amplification of conserved regions from the HIV-1 gag and env open-reading frames. In 20 of 24 men who were studied in a blinded, longitudinal study and were known to be positive for HIV-1 antibodies, an HIV-1 enzymatically amplified product was detected before HIV-1 antibody seroconversion: at 42 months before seroconversion in two cases; at 36 months in one case; at 30 months in one case; at 24 months in four cases; at 18 months in eight cases; at 12 months in one case, at 6 months in three cases and concurrently with confirmation of antibody seroconversion by western blot in the remaining four (Median: 18 months). There appears to be a long and variable interval between virus acquisition and a diagnostic serum antibody response.

## Oncology

### The Risk of Breast Cancer After Irradiation of the Thymus In Infancy

Hildreth, NG., Shore, RE., and Dvoretzky, PM., *New England Journal of Medicine* 1989; 321: 1281-4

The incidence of breast cancer was studied prospectively in a cohort of 1201 women who received x-ray treatment in infancy for an enlarged thymus gland and in their 2469 nonirradiated sisters. After an average of 36 years of followup, there were 22 breast cancers in the irradiated group and 12 among their sisters, yielding an adjusted rate ratio of 3.6 (95 percent confidence interval). It has been established previously that exposure to ionizing radiation during or after puberty increases a woman's risk for breast cancer, but this study suggests that exposure of the female breast to ionizing radiation in infancy likewise increases the risk of breast cancer later in life.

### Cathepsin D: An Independent Prognostic Factor for Metastasis of Breast Cancer

Spyratos, F., Maudelonde, T. Brouillet, JP., Rochefort, H., et al *Lancet* 1989; 8672: 1115-1118.

122 patients with primary breast cancer were followed-up for a median of 4.6 years after surgery. The concentration of cathepsin D in tumor cytosol was strongly related to both metastasis-free survival and disease free survival and was independent of nine conventional prognostic indices, including menopausal status, histologic grade, and cytosolic ER and PR status. Cathepsin D assay may prove to be useful in the future in identifying women, who, though without lymph node involvement at presentation, are at high risk for metastatic disease.

## Psychiatry

### Suicidal Ideation and Suicide Attempts in Panic Disorder and Attacks

Weissman, MM., Klerman, GL., Markowitz, JS., and Ouellette, R. *New England Journal of Medicine* 1989; 321:1209-14

The purpose of this study coordinated by Columbia University College of Physicians and Surgeons was to determine the risk of suicidal ideation and suicide attempts in persons with panic attacks or panic disorder who participated in a large community based study. A random sample of over 18,000 adults drawn from five U.S. communities was used. Subjects who had panic disorder, as compared with other psychiatric disorders had more suicidal ideations and suicide attempts. Twenty percent of the subjects with panic disorder and 12 percent of those with panic attacks had made suicide attempts. These results could not be explained by the coexistence of major depression or of alcohol or drug abuse. The study suggests people with panic disorder/attacks are associated with an increased risk of suicidal ideation and suicide attempts.