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LYME DISEASE

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SENSITIVITY, SPECIFICITY, PREDICTIVE VALUES.

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SMOKING

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SPECIFICITY

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STABLE ANGINA (See ANGINA)

STATIN DRUGS (See OSTEOPOROSIS; See LIPIDS; See DEMENTIA)

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UNSTABLE ANGINA (See also ACUTE CORONARY SYNDROMES)

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VARICELLA-ZOSTER VIRUS

VENOUS THROMBOEMBOLISM

VENTRICULAR DYSFUNCTION

VIOLENCE

VITAMIN B12

VITAMIN E

WARFARIN

WEIGHT GAIN

ZINC LOZENGES (See COMMON COLD)

HIGHLIGHTS - INDEX 2000

ABORTION

3-8 MEDICAL TERMINATION OF PREGNANCY

A safe method of terminating early pregnancy medically is available. Making it available would save thousands of lives yearly. "Legalization of abortion has not been associated with increase in demand for abortion."

ACUTE CORONARY SYNDROMES

6-3 UNFRACTIONATED HEPARIN AND LOW-MOLECULAR-WEIGHT HEPARIN IN ACUTE CORONARY SYNDROME WITHOUT ST ELEVATION: A Meta-Analysis

In aspirin treated patients with the unstable angina or non-Q-wave infarction (no ST elevation), unfractionated heparin and low-molecular-weight-heparin both reduced risk of myocardial infarction and death by 50%.

There was no evidence of benefit from long-term (past 7 days) LMWH.

6-4 MANAGEMENT OF ACUTE CORONARY SYNDROMES

A. High risk patients have all 4 clinical features: Age > 70; Pain at rest; Acute ST *depression* on initial ECG; Elevated troponins

B. Medium risk: One or more of the above; Previous aspirin use; Recurrent ischemia; Previous MI or heart failure; Post myocardial infarction ischemia; Diabetes

Treatment:

High risk and medium risk patients should receive as routine treatment: aspirin, nitrates, beta-blockers, low molecular weight heparin, statins, and ACE inhibitors. In addition, high risk and most medium risk should receive glycoprotein IIb/IIIa inhibitors given as soon as possible.

9-14 CURRENT ROLE OF PLATELET GLYCOPROTEIN IIB/IIIA INHIBITORS IN ACUTE CORONARY SYNDROMES

Intravenous GpIIb/IIIa inhibition therapy has greatly enriched the therapeutic armamentarium for patients with ACSs. Administered at the time of urgent angiography with PTCA, coronary revascularization, or empirically in the emergency department at presentation, these agents build on the antithrombotic template of aspirin and heparin.

GpIIb/IIIa inhibition merits a prominent role in the management of ACSs, either medically or in conjunction with PTCA.

12-1 EFFECTS OF PRAVASTATIN IN 3260 PATIENTS WITH UNSTABLE ANGINA

Patients who survived myocardial infarction or unstable angina had equally unfavorable prognoses. They benefited from lipid-control therapy with pravastatin started some months after the event.

Starting statins immediately after an episode of MI or UA may be even more beneficial, and is becoming standard therapy.

ALCOHOL

4-13 ALCOHOL CONSUMPTION AND RISK OF TYPE 2 DIABETES AMONG U.S. MALE PHYSICIANS.

Another suggestion that one drink a day improves prognosis. Problem is – how to advise patients. interactions are sketchy and lack laboratory analysis of suspect preparations. Health-care practitioners should caution patients about mixing herbs and pharmaceutical drugs

6-20 THE ALCOHOL HANGOVER

Hangover has substantial economic consequences—decreased productivity, absenteeism, poor job performance. "The *primary morbidity* that affects the light-to-moderate drinkers is the hangover, not the long-term consequences of alcohol abuse." "Chronic alcoholism is responsible for only a small proportion of the total societal cost of alcohol use." This is because of the alarming prevalence of veisalgia --- 25% of college students reported a hangover in the previous week; 29% reported losing school time. "More than 75% of persons who have consumed alcohol report that they have experienced hangover at least once." Fifteen percent experienced hangover at least monthly.

Screening for hangover severity and frequency may be used to augment strategies for early detection of alcohol dependency. Sons of alcoholic patents are at risk of more frequent hangover. Hangover severity has been used as one of the predictive criteria for alcoholism. Depression and other psychological disorders are more common in patients with hangover.

9-4 TYPE OF ALCOHOL CONSUMED AND MORTALITY FROM ALL CAUSES, CORONARY HEART DISEASE, AND CANCER.

Wine intake may have a beneficial effect on all-cause mortality that is additive to that of alcohol. The effect is attributable to a reduction in death from coronary disease and cancer. Wine may contain one or several substances that add to the beneficial effect of intake of small amounts of alcohol.

9-5 SEVEN-YEAR CHANGES IN ALCOHOL CONSUMPTION AND SUBSEQUENT RISK OF CARDIOVASCULAR DISEASE IN MEN

Among men with initially low alcohol consumption (1 drink per week of less). a subsequent moderate increase in alcohol consumption may lower CVD risk.

"Given the potential risks and benefits associated with alcohol consumption, physicians counseling of patients must be individualized in the content of primary prevention."

9-6 AGE OF DRINKING ONSET AND UNINTENTIONAL INJURY INVOLVEMENT AFTER DRINKING

Drinking onset at ages younger than 21 years was associated with experiencing more alcohol-related injuries later in life. Our young patients who begin smoking and drinking are calling out for help. We must heed their cry.

ALTERNATIVE MEDICINE

1-19 HERB-DRUG INTERACTIONS

Concurrent use of herbs may mimic, magnify, or oppose the effect of drugs. However, many reports of herb-drug interactions are sketchy and lack laboratory analysis of suspect preparations. Health-care practitioners should caution patients about mixing herbs and pharmaceutical drugs.

11-5 THE ROLE OF COMPLEMENTARY AND ALTERNATIVE MEDICINE

We should listen less to the opinions of those who either overtly promote or stubbornly reject complementary medicine. The many patients who use CM deserve better. Patients and health care providers need to know which forms of CM are safe and effective. Its future should be determined by unbiased scientific evaluation.

Meanwhile, "The complete physician must be sensitive to the values and beliefs of those who live in different worlds, working with them, not against them."

Primary care physicians can learn from some practitioners of CM that there is much more to practice than technical management of disease. We need to concentrate more on the patient as a whole.

AMBULATORY BLOOD PRESSURE

4-19 USE AND INTERPRETATION OF AMBULATORY BLOOD PRESSURE MONITORING: Recommendations of The British Hypertension Society.

A review article. "There is now firm evidence that ambulatory blood pressure monitoring is a more sensitive predictor of cardiovascular outcome than conventional measurement." Primary care practices should make ABPM available to their patients.

ANEMIA

4-24 RED CELLS I: Inherited Anaemias

4-25 RED CELLS II: Acquired Anaemias and Polycythemia\

ANGINA

7-11 PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY VERSUS MEDICAL TREATMENT FOR NON-ACUTE CORONARY HEART DISEASE: A META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

The choice of continued medical treatment versus PTCA remains relevant for patients with limited coronary disease and good myocardial function.

PTCA was more favorable regarding subsequent angina (risk ration 0.70 compared with medical treatment)

But PTCA was less favorable for fatal and non-fatal MI during follow-up (risk ratio = 1.42); for death (RR = 1.32); for subsequent CABG (RR = 1.59); and risk of repeat PTCA (RR = 1.29).

"The procedure should be used only in patients with non-acute CHD in whom angina cannot be controlled by medical treatment. CABG is an alternative in these patients."

"Clinicians should be restrained in their recommendations for PTCA, reserving the procedure for patients whose symptoms of angina are not well controlled on medical treatment."

7-12 TREATMENT OF STABLE ANGINA

In patients with severe angina, PTCA is more effective than medical treatment. However, in patients with mild angina, PTCA may not be appropriate. "We will not harm patients by using drug treatment first and using PTCA only if symptoms persist."

If the BNP is negative, HF is unlikely. If the BNP is positive, it may not be certain that HF is present. BNP is more effective in ruling out HF than ruling HF in. A negative test is likely to exclude HF.

ANGIOTENSIN-CONVERTING-ENZYME (ACE) INHIBITORS

1- 3 EFFECTS OF AN ANGIOTENSIN-CONVERTING-ENZYME INHIBITOR, RAMIPRIL, ON CARDIOVASCULAR EVENTS IN HIGH-RISK PATIENTS

The ACE inhibitor ramipril reduced rates of death, myocardial infarction, and stroke in a broad range of high-risk patients who were not known to have a low ejection fraction or heart failure

1-4 ACE INHIBITION IN CARDIOVASCULAR DISEASE

"It is reasonable to prescribe ramipril for patients who are similar to those enrolled in the HOPE study – high-risk patients with a history of coronary disease, peripheral vascular disease, stroke, or diabetes mellitus and at least one other cardiovascular risk factor such as hypertension, elevated total cholesterol levels, cigarette smoking, or documented microalbuminuria." This will greatly broaden the spectrum of patients who can be treated effectively.

1-5 EFFECT OF RAMIPRIL ON CARDIOVASCULAR AND MICROVASCULAR OUTCOMES IN PEOPLE WITH DIABETES MELLIUS: Results of the HOPE Study and MICRO-HOPE Study

Ramipril was beneficial in reducing cardiovascular events and overt nephropathy in persons with diabetes. Benefit was greater than that attributable to decrease in BP.

This treatment represents a vasculoprotective and renoprotective effect.

1-6 HOPE AND EXTENSION OF THE INDICATIONS FOR ACE INHIBITORS?

These findings have considerable implications for clinical practice. They indicate that virtually *all* patients with a history of cardiovascular disease, not just those with an acute myocardial infarction or heart failure, may benefit from ACE inhibition.

Patients in the study were on maximum therapy for major risk factors, including hypertension. The observed benefit of ramipril was *in addition* to the drugs many subjects were already taking (beta-blockers, calcium blockers, diuretics, aspirin, and lipid-controlling agents).

ANTIBIOTICS

1-8 PENICILLIN FOR ACUTE SORE THROAT: Randomised Double Blind Trial of Seven Days Versus Three Days Treatment or Placebo in Adults.

A seven day course of penicillin was effective in reducing duration of symptoms and reducing risk of suppurative complications. It is also effective in non-group A infections and reduced the risk of recurrent sore throat over the next 6 months. A 3-day course was not any more effective than placebo in reducing total days of symptoms.

1-9 SORE THROATS AND ANTIBIOTICS

"There is no single course of action that will suit all, or even most, patients." The evidence must be applied in different ways according to local conditions. These will include environmental factors (places in the world where acute rheumatic fever is common), history (previous middle ear infection), and social factors. "General practitioners put as much weight on social factors

as on the physical examination in deciding whether or not to use antibiotics. Both patients and their doctors dance delicately around the complicated negotiation of antibiotics for upper respiratory infections, each aware of the other's sensibilities."

"At some point the benefits and harms resulting from treatments, . . . including emerging antibiotic resistance and costs to society, are so finely balanced that patients and their doctors must decide on a choice that is likely to be tipped one way by personal preference alone."

"To expect a one line answer from the evidence (a guideline, for example) is to ask too much."

7-8 CULTURAL AND ECONOMIC FACTORS THAT (MIS)SHAPE ANTIBIOTIC USE: The Nonpharmacologic Basis Of Therapeutics

"Because patient pressure for antibiotic use is a product of contemporary culture, improvement will require a sea change in cultural values." Patients must be aware of the harms that excessive use of antibiotics brings.

ANTICOAGULANT THERAPY

3-9 DECISION ANALYSIS AND GUIDELINE FOR ANTICOAGULANT THERAPY TO PREVENT STROKE IN PATIENTS WITH ATRIAL FIBRILLATION

Although the majority of patients with atrial fibrillation will benefit from anticoagulation to prevent embolic stroke, some patients will not benefit. This decision analysis is based on age, systolic BP, presence of cardiovascular disease, and left ventricular hypertrophy. It presents tables indicating clear benefit, or no benefit from anticoagulation in 12 categories of risk. Patient preference is basic to the decision to use anticoagulation.

ANTIHISTAMINES

4-17 SEDATION WITH NON-SEDATING ANTIHISTAMINES: Four Prescription-Event Monitoring Studies In General Practice

Loratidine (Claratin) and fexofenadine (Allegra) are the least sedating.

ANXIETY

11-9 ASSOCIATION BETWEEN CIGARETTE SMOKING AND ANXIETY DISORDERS DURING ADOLESCENCE AND EARLY ADULTHOOD.

Heavy cigarette smoking during adolescence was associated with a higher risk of development of agoraphobia, generalized anxiety disorder, and panic disorder in early adulthood.

Primary care clinicians should recognize the youths who may be crying out for help.

AORTIC STENOSIS

8-15 PREDICTORS OF OUTCOME IN SEVERE, ASYMPTOMATIC AORTIC STENOSIS

In asymptomatic patients with AS, it appears relatively safe to delay surgery until symptoms develop, However, outcomes vary widely. The presence of moderate or severe calcification, together with a rapid increase in aortic-jet velocity, identifies patients with a very poor prognosis. These patients should be considered for early valve replacement rather than have surgery delayed until symptoms develop.

8-16 AORTIC STENOSIS — LISTEN TO THE PATIENT, LOOK AT THE VALVE

The optimum time to perform valve replacement is as soon as symptoms begin. There is substantial variation in the degree of stenosis associated with the onset of symptoms. The presence of moderate to severe calcification and increasing aortic-jet velocity over time are strong predictors of outcomes.

APPENDICITIS

10-8 CAN WE IMPROVE DIAGNOSIS OF ACUTE APPENDICITIS?

Given the false positive (12%) and false negative rate (5%) of ultrasound, should ultrasound be allowed to override clinical judgement? There is probably no role for ultrasound where clinical evidence is convincing.

The main role of ultrasound may be for the equivocal case, where a combination of repeated clinical assessment and ultrasound may provide the additional information required to determine whether surgery is necessary. Patients should not be sent home after negative ultrasonography unless there are also clinical grounds for their discharge.

ARTERIAL AND VENOUS ASSESSMENT

3-23 NON-INVASIVE METHODS OF ARTERIAL AND VENOUS ASSESSMENT

A review.

ARTERIAL ANEURYSMS

4-22 ARTERIAL ANEURYSMS

Review article – screening; indications for surgery.

ARTERITIS

5-19 STEROID THERAPY FOR VISUAL LOSS IN PATIENTS WITH GIANT-CELL 5-19 STEROID THERAPY FOR VISUAL LOSS IN PATIENTS WITH GIANT-CELL ARTERITIS

Giant-cell arteritis (temporal arteritis) ranks as the prime medical emergency in ophthalmology. "There is no other disease in which the prevention of blindness depends so much on prompt recognition and early treatment."

Primary care physicians should be alert to the association with the vasculitis of polymyalgia rheumatica, and obtain immediate consultation. Corticosteroid treatment saves vision.

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Primary care physicians should be alert to the association with the vasculitis of polymyalgia rheumatica, and obtain immediate consultation. Corticosteroid treatment saves vision.

ASPIRIN

4-4 LOW MOLECULAR WEIGHT HEPARIN VERSUS ASPIRIN IN PATIENTS WITH ACUTE ISCHEMIC STROKE AND ATRIAL FIBRILLATION

Another boost for regular use of aspirin immediately after AF-related embolic stroke and continued for 2 weeks. Just as beneficial as heparin and more acceptable, easier to use, and much cheaper.

4-5 PREVENTION OF PULMONARY EMBOLISM AND DEEP VEIN THROMBOSIS WITH LOW-DOSE ASPIRIN; The Pulmonary Embolism Prevention (PEP) Trial.

Another boost for use of aspirin post hip-surgery. "There is now good evidence for considering aspirin routinely in a wide range of surgical and medical patients at high risk of venous thromboembolism."

11-11 RISK OF GASTROINTESTINAL HAEMORRRHAGE WITH LONG TERM USE OF ASPIRIN: Meta-Analysis

Long-term therapy with aspirin is associated with a clinically significant increase in incidence of GI hemorrhage. No evidence that low dose or enteric coating reduces risk.

Primary care clinicians should alert patients taking long-term low-dose aspirin of this uncommon, but important adverse effect. On the basis of common sense, many clinicians might continue to use enteric coated aspirin (eg, 80 mg daily) despite the lack of any protective effect reported by this study.

11-12 ASPIRIN, LIKE ALL OTHER DRUGS, IS A POISON

The hope was that reducing the dose and providing different formulations of aspirin would reduce the risk of hemorrhage. The preceding meta-analysis negates this hope.

ASTHMA

1-17 ORAL MONTELUKAST COMPARED WITH INHALED SALMETEROL TO PREVENT EXERCISE-INDUCED BRONCHOCONSTRICTION

The bronchoprotective effects of montelukast against exercise-induced bronchoconstriction were maintained throughout 8 weeks. Salmeterol lost much of its benefit over the same time. Tolerance developed to salmeterol, but not to montelukast.

5-10 REGULAR INHALED SALBUTAMOL AND ASTHMA CONTROL: The Trust Randomised Trial

There was no evidence that 4-times daily regular use of the short acting inhaled beta-agonist salbutamol for a year increased the exacerbation rate of asthma.

5-11 META-ANALYSIS OF INCREASED DOSE OF INHALED STEROID OR ADDITION OF SALMETEROL IN SYMPTOMATIC ASTHMA. (MIASMA)

A clinically important point. Addition of the long-acting beta-agonist, salmeterol, to inhaled steroids in patients with symptomatic asthma improved lung function, increased the number of days and nights without symptoms, and reduced the need for rescue medication with no increase in exacerbations. This will spare patients the possible long-term adverse effects of inhaled steroids.

ATRIAL FIBRILLATION

3-9 DECISION ANALYSIS AND GUIDELINE FOR ANTICOAGULANT THERAPY TO PREVENT STROKE IN PATIENTS WITH ATRIAL FIBRILLATION

Although the majority of patients with atrial fibrillation will benefit from anticoagulation to prevent embolic stroke, some patients will not benefit. This decision analysis is based on age, systolic BP, presence of cardiovascular disease, and left ventricular hypertrophy. It presents tables indicating clear benefit, or no benefit from anticoagulation in 12 categories of risk. Patient preference is basic to the decision to use anticoagulation.

3-20 AMIODARONE TO PREVENT RECURRENCE OF ATRIAL FIBRILLATION.

Evidence that, in low dose, it is more effective than other anti-arrhythmics in preventing recurrence of atrial fibrillation. Amiodarone is a "difficult" drug. It is best left to cardiologists or others experienced with use to prescribe and follow.

4-4 LOW MOLECULAR WEIGHT HEPARIN VERSUS ASPIRIN IN PATIENTS WITH ACUTE ISCHEMIC STROKE AND ATRIAL FIBRILLATION

Another boost for regular use of aspirin immediately after AF-related embolic stroke and continued for 2 weeks. Just as beneficial as heparin and more acceptable, easier to use, and much cheaper.

11-3 RHYTHM OR RATE CONTROL IN ATRIAL FIBRILLATION — Pharmacological Intervention in Atrial Fibrillation (PIAF): A Randomized Trial

Rate control and rhythm control yielded similar symptomatic improvement.

Rate control with diltiazem and digoxin had the advantage of fewer adverse effects and fewer hospitalizations; but the disadvantage of continuing warfarin prophylaxis to prevent embolic stroke.

Rhythm control had the advantage of improving exercise tolerance. But the disadvantages of often requiring electrical conversion and continuing amiodarone prophylaxis. Hospital admissions and withdrawals due to drug adverse effects were more frequent. Almost half failed to maintain normal sinus rhythm over 1 year.

"It seems appropriate to choose the best therapeutic strategy according to the needs of the individual patient."

Primary care clinicians may choose the simplest approach — rate control with added aspirin or warfarin.

BACK PAIN

6-8 WORKING OFF BACK PAIN

Patients, health care workers, and employers should be aware that neither sick leave nor inactivity with bed rest benefits recovery. Patients should be informed of the generally good prognosis of non-specific back pain and that the worst part of an episode will resolve, in most cases, within a couple of weeks.

BAYSEAN STATISTICAL METHODS.

12-7 BAYSEAN STATISTICAL METHODS.

PRE-TEST PROBABILITY; SENSITIVITY, SPECIFICITY, POSITIVE LIKELIHOOD RATIO, NEGATIVE LIKELIHOOD RATIO, POST-TEST PROBABILITY.

BETA-BLOCKERS

3-2 EFFECTS OF CONTROLLED-RELEASE METOPROLOL ON TOTAL MORTALITY, HOSPITALIZATIONS, AND WELL-BEING IN PATIENTS WITH HEART FAILURE (MERIT-HF)

3-3 BETA-BLOCKER THERAPY FOR HEART FAILURE

An important addition to understanding benefits of beta-blockers in treatment of mild or moderate heart failure. Metoprolol was associated with reduction in cardiovascular events and also improvement in quality of life and functional class. Use of beta-blockers in treatment of heart failure has become a dominant part of standard therapy. (Another sea change.) Primary care physicians should be among those who prescribe them most often. But, start low and go slow.

BLOOD PRESSURE

1-1 THE RELATION BETWEEN BLOOD PRESSURE AND MORTALITY DUE TO CORONARY HEART DISEASE AMONG MEN IN DIFFERENT PARTS OF THE WORLD.

1) Absolute risk of mortality from CHD at a given BP differed significantly between countries. 2) In all countries, absolute risk also rose with each quartile of increase in BP. 3) There was no distinct cutpoint below which risk did not continue to decline or

above which risk did not increase. 4) At a given BP (eg, 140/80) absolute risks differed between populations by a factor of 3 to 4.

If the absolute risk of CHD is taken as a criterion for the use of antihypertensive therapy, this finding will have major implications for clinical practice in different parts of the world. Treatment of BP should be based on absolute risk of CHD in each individual, not on the level of BP.

1-2 BLOOD PRESSURE AND THE RISK OF CARDIOVASCULAR DISEASE.

Prognosis among persons with "hypertension" is highly variable, depending on factors other than BP — sex, age, other risk factors, target organ damage, and history of cardiovascular disease.

"The usefulness of hypertension as an independent diagnostic category appears to be limited and it is arguable, from both a public health and clinical perspective, that we should refocus our efforts toward the lowering of blood pressure and the prevention of blood-pressure-related diseases, in both hypertensive and *nonhypertensive* persons. (Ie, in some individuals lowering BP from 140/85 to 125/80 may be more beneficial than lowering BP from 160/95 to 140/90.

"There is clearly a strong rationale for expecting many patients who are at high risk for major cardiovascular events (whether they are 'hypertensive' or not) to benefit from a substantive reduction in blood pressure."

4-19 USE AND INTERPRETATION OF AMBULATORY BLOOD PRESSURE MONITORING: Recommendations of The British Hypertension Society.

A review article. "There is now firm evidence that ambulatory blood pressure monitoring is a more sensitive predictor of cardiovascular outcome than conventional measurement." Primary care practices should make ABPM available to their patients.

10-2 PULSE PRESSURE AND MORTALITY

The best single measure of blood pressure to predict mortality in older people appears to be the pulse pressure. A high systolic combined with a low diastolic BP therefore correlates with increased risk.

In middle-aged persons, systolic BP alone is a major risk factor.

In older persons, the pulse pressure is the major risk factor.

Systolic BP correlates closely with pulse pressure.

Thus, systolic BP alone can be considered a common denominator of risk.

Treatment is aimed at reducing systolic BP

BREAST CANCER

1-10 MENOPAUSAL ESTROGEN AND ESTROGEN-PROGESTIN REPLACEMENT THERAPY AND BREAST CANCER RISK

Hormone replacement therapy with estrogen-progestin increased risk of breast cancer beyond that of estrogen alone

1-11 POSTMENOPAUSAL ESTROGENS - OPPPOSED, UNOPPOSED, OR NONE OF THE ABOVE

The risks of BC due to HT use are determined by duration of use. Short-term use (eg, 2 to 3 years) for relief of menopausal symptoms should not be influenced by fear of BC.

The editorialist tilts toward lifestyle measures as first line therapy, and suggests this may be all that is needed to preserve bone mass. This begs the question — will drug therapy add to the benefits of a high-quality and sustained lifestyle?

2-8 ASSESSING THE RISK OF BREAST CANCER

Primary care clinicians have the responsibility to assess and present to their patients valid risk estimates for the risk of breast cancer. This will allow reasonable choices about hormone replacement therapy, mammography, tamoxifen preventive therapy, and genetic testing.

5-20 ORAL CLONIDINE IN POSTMENOPAUSAL PATIENTS WITH BREAST CANCER EXPERIENCING TAMOXIFEN-INDUCED HOT FLASHES

An occasional patient may be relieved of very troublesome symptoms by a medication with low toxicity.

10-17 ORAL CONTRACEPTIVES AND BREAST CANCER.

There was a significant correlation between ever-use of OCs and risk of BC in sisters and daughters of probands (RR = 3.3 compared to marry-ins), but not among granddaughters or nieces. Women using OCs who had 3 family members with BC had a RR of 5; for those with 5 affected family members RR = 11. "These data offer strong support for the amplified effect of estrogen in the presence of genetic risk for BC."

However, the increased risk was seen only in users before 1975 when formulations contained higher doses of estrogen and progestins. Among first degree relatives who used OCs after 1975, the RR of BC was 0.9 compared with non-users.

First degree relatives of a woman with BC should use other contraceptive methods.

BRONCHITIS

12-17 UNCOMPLICATED ACUTE BRONCHITIS

Decreased rates of antibiotic treatment are not associated with increased utilization, return visits, or dissatisfaction with care. "The evidence is indisputable that *not* prescribing antibiotics to patients with uncomplicated bronchitis is safe, and does *not* result in excess morbidity."

Ruling out pneumonia is the primary objective in evaluating otherwise healthy adults with acute cough illness. (Pneumonia is unlikely if heart rate is < 100, respiratory rate is < 24, and temperature $< 38^{\circ}$ C [101.5°F]

CANCER (See also BREAST CANCER)

7-19 ENVIRONMENTAL AND HERITABLE FACTORS IN THE CAUSATION OF CANCER

"We conclude that the overwhelming contributor to the causation of cancer in the population of twins that we studied was the environment." Environment has the principal role in causing sporadic cancer.

Geographic differences, trends over time in the risk of cancer, and detailed studies of migrant populations overwhelmingly implicate environmental exposures as major causal factors, and often identify the responsible carcinogens (eg, tobacco, alcohol, radiation, occupational toxins, infections, diet, drugs). This has led to the widely accepted estimate that 80 to 90 percent of human cancer is due to environmental factors.

CARDIOPULMONARY RESUSCITATION

5-12 CARDIOPULMONARY RESUSCITATION BY CHEST COMPRESSION ALONE OR WITH MOUTH -TO-MOUTH VENTILATION

Bystander-witnessed cardiac arrest treated by cardiac compression alone was just as beneficial as cardiac compression plus mouth-to-mouth ventilation. This will lead to greater willingness of bystanders to apply CPR

5-13 CARDIOPULMONARY RESUSCITATION -- STRENGTHENING THE LINKS IN THE CHAIN OF SURVIVAL

Bystander-initiated CPR is critical. But a survey of laypersons assumed to know basic CPR, reported that only 15% would definitely perform CPR on a stranger that would require mouth-to-mouth ventilation. In contrast 68% would perform cardiac compression alone. The majority had an aversion to mouth-to-mouth breathing, or a fear of infection.

CARDIOVASCULAR DISEASE

1-1 THE RELATION BETWEEN BLOOD PRESSURE AND MORTALITY DUE TO CORONARY HEART DISEASE AMONG MEN IN DIFFERENT PARTS OF THE WORLD.

1) Absolute risk of mortality from CHD at a given BP differed significantly between countries. 2) In all countries, absolute risk also rose with each quartile of increase in BP. 3) There was no distinct cutpoint below which risk did not continue to decline or above which risk did not increase. 4) At a given BP (eg, 140/80) absolute risks differed between populations by a factor of 3 to 4.

If the absolute risk of CHD is taken as a criterion for the use of antihypertensive therapy, this finding will have major implications for clinical practice in different parts of the world. Treatment of BP should be based on absolute risk of CHD in each individual, not on the level of BP.

1-2 BLOOD PRESSURE AND THE RISK OF CARDIOVASCULAR DISEASE.

Prognosis among persons with "hypertension" is highly variable, depending on factors other than BP — sex, age, other risk factors, target organ damage, and history of cardiovascular disease.

"The usefulness of hypertension as an independent diagnostic category appears to be limited and it is arguable, from both a public health and clinical perspective, that we should refocus our efforts toward the lowering of blood pressure and the prevention of blood-pressure-related diseases, in both hypertensive and *nonhypertensive* persons. (Ie, in some individuals lowering BP from 140/85 to 125/80 may be more beneficial than lowering BP from 160/95 to 140/90.

"There is clearly a strong rationale for expecting many patients who are at high risk for major cardiovascular events (whether they are 'hypertensive' or not) to benefit from a substantive reduction in blood pressure."

1- 3 EFFECTS OF AN ANGIOTENSIN-CONVERTING-ENZYME INHIBITOR, RAMIPRIL, ON CARDIOVASCULAR EVENTS IN HIGH-RISK PATIENTS

The ACE inhibitor ramipril reduced rates of death, myocardial infarction, and stroke in a broad range of high-risk patients who were not known to have a low ejection fraction or heart failure *NEJM* January 20, 2000;342: 145-53

1-4 ACE INHIBITION IN CARDIOVASCULAR DISEASE

"It is reasonable to prescribe ramipril for patients who are similar to those enrolled in the HOPE study – high-risk patients with a history of coronary disease, peripheral vascular disease, stroke, or diabetes mellitus and at least one other cardiovascular risk factor such as hypertension, elevated total cholesterol levels, cigarette smoking, or documented microalbuminuria." This will greatly broaden the spectrum of patients who can be treated effectively.

1-5 EFFECT OF RAMIPRIL ON CARDIOVASCULAR AND MICROVASCULAR OUTCOMES IN PEOPLE WITH DIABETES MELLIUS: Results of the HOPE Study and MICRO-HOPE Study

Ramipril was beneficial in reducing cardiovascular events and overt nephropathy in persons with diabetes. Benefit was greater than that attributable to decrease in BP. This treatment represents a vasculoprotective and renoprotective effect.

1-6 HOPE AND EXTENSION OF THE INDICATIONS FOR ACE INHIBITORS?

These findings have considerable implications for clinical practice. They indicate that virtually *all* patients with a history of cardiovascular disease, not just those with an acute myocardial infarction or heart failure, may benefit from ACE inhibition. Patients in the study were on maximum therapy for major risk factors, including hypertension. The observed benefit of ramipril was *in addition* to the drugs many subjects were already taking (beta-blockers, calcium blockers, diuretics, aspirin, and lipid-controlling agents).

1-7 VITAMIN E SUPPLEMENTATION AND CARDIOVASCULAR EVENTS IN HIGH-RISK PATIENTS

Vitamin E, in this cohort of high-risk patients, had no apparent benefit on cardiovascular outcomes. It is very unlikely that vitamin E given for 5 years has any clinically worthwhile effect on cardiovascular disease.

3-17 GUIDELINES ON PREVENTING CARDIOVASCULAR DISEASE IN CLINICAL PRACTICE.

3-18 ESTIMATING CARDIOVASCULAR RISK FOR PRIMARY PREVENTION: Outstanding Questions For Primary Care

Primary care clinicians should keep one of the tables now available to inform patients of their risk of developing cardiovascular disease within the next 10 years. Absolute risk is strongly influenced by a combination of risk factors. Drug therapy (especially for lipid and BP control) should be considered for those at high risk. A 30% risk over 10 years identifies over 3% of the population. This is in addition to

the 5% with established disease who also require drug therapy.

12-8 A PROSPECTIVE, OBSERVATIONAL STUDY OF POSTMENOPAUSAL HORMONE THERAPY AND PRIMARY PREVENTION OF CARDIOVASCULAR DISEASE.

"In this large, observational, prospective study, the risk of major coronary events appeared to be substantially decreased among current users of hormone therapy."

Among women taking oral conjugated estrogen (eg, *Premarin*) the risk reduction was similar in those taking 0.3 mg/d and 0.625 mg/d. (RR = 0.54 and 0.58 compared with never-users.)

Primary care clinicians might be more willing to begin prescribing *Premarin* at the 0.3 mg dose. It would be reasonable to consider that breast and ovarian cancer may be lower in women taking this dose.

CAROTID ATHEROSCLEROSIS

8-8 STRONG AND SIGNIFICANT RELATIONSHIPS BETWEEN AGGREGATION OF MAJOR CORONARY RISK FACTORS AND THE ACCELERATION OF CAROTID ATHEROSCLEROSIS IN THE GENERAL POPULATION OF A JAPANESE CITY.

There was a strong relationship between the aggregation of 3 major risk factors (hypertension, high cholesterol, and smoking) and acceleration of progression of carotid atherosclerosis. Intimal-medial thickness (IMT) of the carotid arteries is a good indicator of the presence and extent of coronary artery disease. "Our data suggest that it is possible to infer non-invasively and correctly the extent of coronary atherosclerosis on the basis of carotid atherosclerosis."

Studies indicate that as the IMT increases, the risk of myocardial infarction increases.

CATARACT SURGERY

1-15 THE VALUE OF PREOPERATIVE MEDICAL TESTING BEFORE CATARACT SURGERY

Routine medical testing before cataract surgery did not increase the safety of the surgery.

CHEST PAIN

4-21 EVALUATION OF THE PATIENT WITH ACUTE CHEST PAIN

Review article. Helpful tables from the American College of Emergency Physicians.

6-10 PROSPECTIVE AUDIT OF INCIDENCE OF PROGNOSTICALLY IMPORTANT MYOCARDIAL DAMAGE IN PATIENTS DISCHARGED FROM EMERGENCY DEPARTMENT. One out of every 16 patients with acute chest pain discharged from the ED had important myocardial damage. Follow-up measurements with cardiac troponins over the next 24-48 hours is important.

CHOLESTEROL EMBOLI SYNDROME

10-13 CHOLESTEROL EMBOLI SYNDROME

Cholesterol embolization (**CE**) is a common complication of arteriography, vascular surgery, thrombolysis, and anticoagulation in elderly patients. The diagnosis is not often considered.

CE is a serious multisystem disorder, more common than has been supposed. It is characterized by a classic triad: 1) livido reticularis, 2) acute renal failure, and 3) eosinophilia

CE should feature strongly in the differential diagnosis of acute renal failure in elderly patients after angiography or other interventions. Clinicians should be aware of the delayed onset which often obscures the causative link. It may, however, occur without instrumentation.

CHRONIC OBSTRUCTIVE PULMONARY DISEASE

5-17 RANDOMISED, DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY OF FLUTICASONE PROPRIONATE IN PATIENTS WITH MODERATE TO SEVERE CHRONIC OBSTRUCTIVE PULMONARY DISEASE; THE ISOLDE TRIAL

The improvements in clinical outcomes support the use of long-term inhaled corticosteroids in patients with moderate to severe COPD. However, benefits are minor.

CLAUDICATION

10-9 THE PRACTICAL MANAGEMENT OF CLAUDICATION

As A Marker For Cardiovascular Disease It Needs Active Treatment

Since peripheral vascular disease is a strong risk factor for myocardial infarction and stroke, it might be expected that patients would benefit by reducing risk of MI and stroke.

Claudication is a marker for generalized atherosclerotic disease. We should look at the patient's overall vascular risk and act accordingly. Preventive interventions include: smoking cessation; exercise; lipid control; and antiplatelet therapy.

COGNITIVE FUNCTION

8-11 COGNITIVE DECLINE IN WOMEN IN RELATION TO NON-PROTEIN BOUND OESTRADIOL CONCENTRATIONS

Older women with high concentrations of non-protein-bound and bioavailable estradiol were less likely to develop cognitive dysfunction than women with low concentrations.

COLONOSCOPY

6-1 A COMPARISON OF COLONOSCOPY AND DOUBLE-CONTRAST BARIUM-ENEMA FOR SURVEILLANCE AFTER POLYPECTOMY

In patients who had undergone colonoscopic polypectomy 1 to 3 years previously, colonoscopy was a more effective method for surveillance than double-contrast Ba-enema. "Available screening methods should make it possible to prevent most deaths from colorectal cancer. All persons 50 years of age and older who are at average risk of colon cancer should undergo comprehensive evaluation of the entire large bowel." "Screening is currently best accomplished by colonoscopy."

6-2 FLAT AND DEPRESSED COLONIC NEOPLASMS: A Prospective Study Of 1000 Colonoscopies In The UK

The polyp-carcinoma hypothesis prompts colonoscopists to search only for polypoid lesions when screening. Many early carcinomas may be missed if flat or depressed neoplasms are not searched for.

COMMON COLD

8-18 DURATION OF SYMPTOMS AND PLASMA CYTOKINE LEVELS IN PATIENTS WITH THE COMMON COLD TREATED WITH ZINC ACETATE

Treatment with zinc lozenges was associated with reduction in the duration and severity of symptoms of the common cold.

8-19 LESSONS LEARNED FROM ATTEMPTS TO ESTABLISH THE BLIND IN PLACEBO-CONTROLLED TRIALS OF ZINC FOR THE COMMON COLD

The editorialist remains unconvinced. He suspects that the placebo and the zinc had detectable differences, and that the blind was not completely established.

COMPLIANCE

6-17 THE LANGUAGE OF MEDICATION-TAKING

The editorialist argues that the terms "compliance" and "adherence" are problematic. They exaggerate the physician's control over the process of taking medications and imply that the patient must take the medication as prescribed to obtain benefit. The terms "non-compliance" and "non-adherence" create a clinically unjustifiable distinction between persons who take all of their pills as prescribed and those who deviate form the prescription in any way.

The terms are problematic because they imply that the physician developed the therapeutic plan unilaterally rather than through two-way negotiation with the patient. "Patients base decisions about taking medications on many considerations besides their physician's advice." "Our role is limited to education and advice."

CONGENITAL HEART DISEASE

2-18 CONGENITAL HEART DISEASE IN ADULTS

For those who wish a refresher course. Beautiful illustrations.

CONTINUING MEDICAL EDUCATION

2-11 SHOULD DOCTORS GET CME POINTS FOR READING?

Primary care clinicians need help to keep up with the current medical literature. Services which access, read, assess, abstract, condense, and present clinically relevant studies in a clear and easily reviewable format may help.

CORONARY ATHEROSCLEROSIS

8-9 EFFECTS OF ESTROGEN REPLACEMENT ON THE PROGRESSION OF CORONARY-ARTERY ATHEROSCLEROSIS

Three years of treatment with estrogen and estrogen-progestin did not slow progression of coronary atherosclerosis in postmenopausal women who had established disease at baseline.

"These results suggest that such women should not use estrogen replacement with an expectation of cardiovascular benefit."

"Estrogen therapy may still be effective for the *primary* prevention of coronary heart disease, but this has not yet been verified."

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7-3 PRIMARY PREVENTION OF CORONARY HEART DISEASE IN WOMEN THROUGH DIET AND LIFESTYLE

Among women, adherence to lifestyle guidelines involving diet, exercise, and abstinence from smoking was associated with a very low risk of coronary heart disease.

8-10 TRENDS IN THE INCIDENCE OF CORONARY HEART DISEASE AND CHANGES IN DIET AND LIFESTYLE IN WOMEN

There was a substantial decline in incidence of CHD from 1980 to 1995 among women in the Nurses' health Study. Reductions in smoking, improvement in diet, and increase in HRT accounted for much of the improvement.

Increase in the incidence of obesity appears to have prevented a further improvement.

These factors are important in primary prevention of CHD.

9-13 MULTIPLE COMPLEX CORONARY PLAQUES IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION

Patients with acute MI may harbor multiple complex coronary plaques that are associated with adverse clinical outcomes. Plaque instability may occur as a widespread process throughout the coronary arteries.

Atherosclerosis is a widespread disease. Not only of the coronary arteries, but also of carotid, renal, peripheral arteries, and the aorta. When a coronary lesion is identified, we can be certain that lesions are present elsewhere in the arterial tree as well as elsewhere in the coronary tree. We are dealing with a wide-spread, not a localized disease. Medical therapy, not surgery, is the ultimate answer to primary prevention and treatment.

We now have excellent measures to prevent or delay the process. If these fail and individuals develop clinical disease, we still may have a good chance at stabilizing the disease with all-out medical therapy and life-style changes.

COSTS OF MEDICATION

10-1 PHYSICIANS' ATTITUDES ABOUT PRESCRIBING AND KNOWLEDGE OF THE COSTS OF COMMON MEDICINES.

Physicians were predisposed to being cost-conscious in their prescribing habits, but lacked knowledge about actual costs. Considering the benefit/harm-cost ratio is the basic consideration of therapy. We often fail to consider the cost denominator. We should know the costs especially of drugs used long term (eg, hypertension, diabetes, lipid disorders).

It is easy to access costs on the internet, for both generics and brand-names. The web pages of major pharmacies (eg, **www.cvs.com** 1-888-607-4287) post actual retail costs.

DEMENTIA

1-20 TREATMENT OF ALZHEIMER'S DISEASE

Review of criteria for diagnosis, outcome measures in clinical trials, cholinergic augmentation therapy, treatment of behavioral manifestations

2-15 ESTROGEN REPLACEMENT THERAPY FOR TREATMENT OF MILD TO MODERATE ALZHEIMER DISEASE

A negative study contradicting previous reports. Self-correcting the scientific literature is essential to continue trust from the public as well as clinicians. With constant correction and up-dating, ultimately the scientific approach to medicine is strengthened.

4-15 INFLUENCE OF SOCIAL NETWORK ON OCCURRENCE OF DEMENTIA: A COMMUNITY-BASED LONGITUDINAL STUDY

Interesting observation. Satisfying social connections lessen likelihood of developing dementia. Another indication that you should "use it or lose it".

4-16 WHICH INFLUENCES COGNITIVE FUNCTION: LIVING ALONE OR BEING ALONE?

"Being alone is what is risky, not living alone.

11-15 STATINS AND THE RISK OF DEMENTIA

Individuals over age 50 who were prescribed statins had a substantially lowered risk of developing dementia.

This preliminary report needs replication. Patients who ask about it should be told statins should not be prescribed solely for this purpose. It may be an added benefit.

12-13 EFFICACY OF RIVASTIGMINE IN DEMENTIA WITH LEWY BODIES.

Rivastigmine produced clinically significant behavioral effects in patients with Lewy-body dementia, and seems safe and well tolerated if titrated individually.

12-14 CHOLINESTERASE INHIBITORS; EXPANDING APPLICATIONS

The behavioral improvement achieved with rivastigmine in the study is clinically relevant. Rivastigmine has pharmacological properties that distinguish it from other cholinesterase inhibitors, so the findings may not apply to other drugs in the class.

12-15 EFFICACY AND SAFETY OF GALANTAMINE IN PATIENTS WITH MILD TO MODERATED ALZHEIMER'S DISEASE

Compared with placebo, galantamine was effective and well tolerated in Alzheimer's disease.

DEPRESSION

5-23 A 52-YEAR-OLD SUICIDAL MAN

Reference article presents the Harvard Department of Psychiatry and National Depression Screening Day Scale. Depression screening has been proven to be an effective way of identifying those with undiagnosed depressive illness and a useful tool for the primary care physician attempting to ascertain the likelihood and severity of depression and the presence of suicidal thoughts.

7-6 DEPRESSION AS A RISK FACTOR FOR NONCOMPLIANCE WITH MEDICAL TREATMENT

Depressed patients were 3 times more likely to be non-compliant with medical recommendations.

9-17 COMPARISON OF ST JOHN'S WORT AND IMIPRAMINE FOR TREATING DEPRESSION

This Hypericum extract was therapeutically equivalent to imipramine in treating mild to moderate depression. It was better tolerated than imipramine.

12-10 MANAGING DEPRESSION IN MEDICAL OUTPATIENTS

Two simple questions can be used for case-finding:

- 1. During the past month, have you often been bothered by feeling down, depressed, or hopeless?
- 2. During the past month have you often been bothered by having little interest or pleasure in doing things?

DIABETES

2-3 RETINOPATHY AND NEPHROPATHY IN PATIENTS WITH TYPE 1 DIABETES FOUR YEARS AFTER A TRIAL OF INTENSIVE THERAPY: The EDIC Study

Primary care clinicians can successfully maintain intensive therapy to control glycemia and reduce kidney and eye complications.

4-13 ALCOHOL CONSUMPTION AND RISK OF TYPE 2 DIABETES AMONG U.S. MALE PHYSICIANS.

Another suggestion that one drink a day improves prognosis. Problem is – how to advise patients.

4-14 LOW CARDIORESPIRATORY FITNESS AND PHYSICAL INACTIVITY AS PREDICTORS OF MORTALITY IN MEN WITH TYPE 2 DIABETES

Another benefit of physical fitness. Primary care clinicians should constantly advise fitness as a cornerstone of treatment, not only for patients with diabetes, but for all.

4-3 EFFECT OF METFORMIN AND ROSIGLITAZONE COMBINATION THERAPY IN PATIENTS WITH TYPE 2 DIABETES

Addition of rosiglitazone to high dose metformin improves glycemic control – a valid, practical clinical application.

5-6 INSULIN GLARGINE

This new long-acting insulin analogue (now approved by the FDA) supplies basal insulin requirements throughout 24 hours. By mimicking nature, use of an insulin with a peakless action profile should improve blood glucose control. Combining insulin glargine with short-acting insulins at mealtime should optimize control.

5-1 BENEFICIAL EFFECTS OF HIGH DIETARY FIBER INTAKE IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

A high intake of dietary fiber (25 g soluble, 25 g insoluble — about 3 times the usual US intake) derived from natural foods without fortification by fiber preparations and supplements, improved glycemic control, decreased hyperinsulinemia, and lowered lipids in patients with type 2 diabetes. The diet was palatable and accepted.

5-2 DIETARY TREATMENT OF DIABETES MELLLITUS

Dietary manipulation produces dividends in patients with diabetes. Combining foods with high fiber content and a low glycemic index lowers blood glucose synergistically.

The key element in dietary change is the acceptability of the food choices. If dietary modifications are attractive to patients, they will be successful.

The key to dietary change is the repetition of dietary education by the primary care physician at each visit.

8-6 CONTROLLING GLUCOSE AND BLOOD PRESSURE IN TYPE 2 DIABETES.

The clinical message is clear and important. To avoid complications control the HbA1c as close to 6% as possible and the systolic BP as low as possible. We must ask whether treatment to lower raised glucose should be started much earlier. Perhaps impaired glucose tolerance should be an indication for treatment.

8-4 ASSOCIATION OF GLYCEMIA WITH MACROVASCULAR AND MICROVASCULAR COMPLICATIONS OF TYPE 2 DIABETES (UKPDS 35)

Cardiovascular and cerebrovascular disease account for more than 50% of all mortality in diabetic populations. The data suggest that any improvement in glycemic control across the diabetic range is likely to reduce the risk of cardiovascular complications. Even a modest reduction in glycemia has the potential to prevent deaths from *macro*-vascular complications related to diabetes.

Glycemia is a risk factor for macro-vascular complications as well as micro-vascular complications.

8-5 ASSOCIATION OF SYSTOLIC BLOOD PRESSURE WITH MACROVASCULAR AND MICROVASCULAR COMPLICATIONS OF TYPE 2 DIABETES. (UKPDS 36)

This is the converse of the preceding investigation. The risk of *macro*-vascular complications related to systolic BP is well established. This study provides evidence that *micro*-vascular complications (renal retinal, and peripheral nerve) may also be related to systolic BP.

9-9 HIGH BLOOD PRESSURE AND DIABETES MELLITUS

Intensive control of BP in patients with combined diabetes-hypertension to levels below 135/85 reduces risk of cardiovascular events. All 4 drug classes — diuretics, beta-blockers, ACE inhibitors, and calcium blockers — are effective.

Most patients will require combined therapy to obtain BP goal of 130/85

10-10 A COMPARISON OF GLYBURIDE AND INSULIN IN WOMEN WITH GESTATIONAL DIABETES MELLITUS

Gyburide (*DiaBeta*; *generic*) is a clinically effective alternative to insulin in women with gestational diabetes. It is as safe as insulin.

12-9 DIURNAL VARIATION IN FASTING PLASMA GLUCOSE: Implications for Diagnosis of Diabetes in Patients Examined in the Afternoon

Fasting blood glucose concentrations are higher in the early AM than in the PM. The early AM increase in glucose and insulin requirements have been attributed to the "dawn phenomenon". Nocturnal elevations of growth hormone and early morning increases in cortisol secretion have been cited as causes of a higher blood glucose in the early AM. They also report higher serum insulin and serum C peptide levels in the morning in non-diabetic subjects.

If current diagnostic criteria are applied to patients tested in the afternoon, many cases of undiagnosed diabetes will be missed. (Ie, FPG may be above 126 mg/dL in the early AM, and below 126 in the PM.) "Regardless of the time of day that patients are tested, physicians need to confirm the diagnosis by testing on a different day."

12-4 RANDOMISED CONTROLLED TRIAL OF DUAL BLOCKADE OF RENIN-ANGIOTENSIN SYSTEM IN PATIENTS WITH HYPERTENSION, MICROALBUMINURIA, AND NON-INSULIN-DEPENDENT DIABETES

The ACE-inhibitor lisinopril and the angiotensin II blocker candesartan were equally effective in reducing BP and albumin excretion in diabetic patients with hypertension and microalbuminuria.

When the 2 drugs were combined, BP and albuminuria were further improved.

Combination treatment was well tolerated.

DIARRHEA

8-21 RACECADOTRIL IN THE TREATMENT OF ACUTE WATERY DIARRHEA IN CHILDREN.

A new encephalinase inhibitor reduces symptoms of diarrhea in children.

DIET

4-1 A PROSPECTIVE STUDY OF DIET QUALITY AND MORTALITY IN WOMEN

Study supports the practical clinical value of adherence to the "Healthy diet" promoted by the well known food pyramid.

7-3 PRIMARY PREVENTION OF CORONARY HEART DISEASE IN WOMEN THROUGH DIET AND LIFESTYLE

Among women, adherence to lifestyle guidelines involving diet, exercise, and abstinence from smoking was associated with a very low risk of coronary heart disease.

DISCREPANCIES

7-7 DISCREPANCIES IN THE USE OF MEDICATIONS

Discrepancies in use of medications were common and involved all classes of drugs. Older age and polypharmacy were the most significant correlates of discrepancy.

DOCTOR-PATIENT RELATIONSHIP

5-5 HOW TO IMPROVE COMMUNICATION BETWEEN DOCTORS AND PATIENTS

There are 3 distinct approaches to treatment decision-making that doctors can make. Each has different implications for the roles of doctors and patients in communicating information, and the type, amount, and flow of information between the two: 1) the paternalistic approach, 2) the informed approach, and 3) the shared approach. In the 3rd approach, doctors commit themselves to an interactive relationship with patients in developing a treatment recommendation that is consistent with patient values and preferences.

6-21 PHYSICIAN AND PATIENT SPIRITUALITY: PROFESSIONAL BOUNDARIES, COMPETENCY, AND ETHICS

Spirituality pertains to the ultimate meaning and purpose of life. It has clinical relevance.

Clinical studies are beginning to clarify how spirituality and religion can contribute to the coping strategies of many patients with severe, chronic, and terminal conditions.

Should the physician discuss spiritual issues with his or her patients?

What are the boundaries between the physician and patient regarding these issues?

What are the professional boundaries between the physician and the chaplain?

6-17 THE LANGUAGE OF MEDICATION-TAKING

The editorialist argues that the terms "compliance" and "adherence" are problematic. They exaggerate the physician's control over the process of taking medications and imply that the patient must take the medication as prescribed to obtain benefit. The terms "non-compliance" and "non-adherence" create a clinically unjustifiable distinction between persons who take all of their pills as prescribed and those who deviate form the prescription in any way.

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7-6 DEPRESSION AS A RISK FACTOR FOR NONCOMPLIANCE WITH MEDICAL TREATMENT

Depressed patients were 3 times more likely to be non-compliant with medical recommendations.

8-1 A STUDY OF PATIENT CLUES AND PHYSICIAN RESPONSES IN PRIMARY CARE AND SURGICAL SETTINGS.

A clue is a direct or indirect comment that provides information about any aspect of a patient's feelings or life circumstances. Clues offer a glimpse into the inner world of patients and create an opportunity for empathy and personal connection. By exploring the meaning of these clues for the patient, physicians can deepen the therapeutic relationship and potentially enhance clinical outcomes.

Physicians often by-pass these clues, missing potential opportunities to strengthen trust and the patient-physician relationship.

Physicians can learn to modify their communication style.

10-18 RELIGION, SPIRITUALITY, AND MEDICINE: Application To Clinical Practice

Patients want to be seen and treated as whole persons, not as diseases. A whole person is someone whose being has physical, emotional, and spiritual dimensions. Ignoring any one of these aspects of humanity leaves the patient feeling incomplete, and may even interfere with healing. For many patients spirituality is an important part of wholeness.

The editorialist quotes 4 simple questions the ACP suggests be asked of those with terminal illness which acknowledges the spiritual life of the patient and might be appropriate and helpful.

10-1 PHYSICIANS' ATTITUDES ABOUT PRESCRIBING AND KNOWLEDGE OF THE COSTS OF COMMON MEDICINES.

Physicians were predisposed to being cost-conscious in their prescribing habits, but lacked knowledge about actual costs. Considering the benefit/harm-cost ratio is the basic consideration of therapy. We often fail to consider the cost denominator. We should know the costs especially of drugs used long term (eg, hypertension, diabetes, lipid disorders).

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DOCTRINE OF DOUBLE-EFFECT

7-1 OPIOID USE IN THE LAST WEEK OF LIFE AND IMPLICATIONS FOR END-OF-LIFE DECISION-MAKING

The Doctrine of Double-effect states that a harmful effect of treatment, even resulting in death, is permissible if it is not intended, and occurs as a side-effect of a beneficial action.

"Our findings indicate that appropriate dose of opioids for symptom control does not shorten life and there is little need to evoke DDE."

Studies of safety of opioids in cancer patients suggest that problems with respiratory depression are unlikely. Patients most at risk are those who receive increase over 2.5 times their usual dose. Increases above 2.5-fold occurred in only 5 patients in this series.

The DDE may be a useful principle that can offer reassurance when facing difficult treatment decisions. It must be distinguished from euthanasia and its role should not be exaggerated.

The doctrine of double effect need not be invoked to provide symptom control at the end of life.

DOG BITES

6-5 PREVENTING DOG BITES IN CHILDREN: Randomised Controlled Trial Of An Educational Intervention

A brief training period for primary school children increased their precautionary behavior around a dog. A practical application of proper parenting.

DYSPEPSIA

5-14 EFFECT OF POPULATION SCREENING AND TREATMENT FOR HELICOBACTER PYLORI ON DYSPEPSIA AND QUALITY OF LIFE IN THE COMMUNITY: A Randomized Controlled Trial

Community screening and treatment for *H pylori* produced only a 5% reduction in dyspepsia. This small benefit had no impact on quality of life.

Should we screen for *H pylori* in patients with troublesome, persistent dyspepsia? One approach would be to first perform endoscopy for diagnosis and reassurance. Screening for the infection would be a reasonable accompaniment. If positive, many primary care physicians would treat the infection even when a peptic ulcer was not present to possibly prevent development of future ulcer or cancer. There is a slight chance this will lead to symptom improvement.

ETHICS

6-21 PHYSICIAN AND PATIENT SPIRITUALITY: PROFESSIONAL BOUNDARIES, COMPETENCY, AND ETHICS

Spirituality pertains to the ultimate meaning and purpose of life. It has clinical relevance.

Clinical studies are beginning to clarify how spirituality and religion can contribute to the coping strategies of many patients with severe, chronic, and terminal conditions.

Should the physician discuss spiritual issues with his or her patients?

What are the boundaries between the physician and patient regarding these issues?

What are the professional boundaries between the physician and the chaplain?

EXERCISE TESTING

11-18 EXERCISE TESTING IN CLINICAL MEDICINE

"Brief, inexpensive, and done in most cases without the presence of a cardiologist, the exercise test offers the highest value for predictive accuracy of any of the non-invasive tests for coronary artery disease."

Primary care clinicians may wish to add a treadmill to their practice.

FACTOR V MUTATIONS

There are many genetic mutations in clotting and anti-clotting factors which predispose individuals to venous thromboembolic disease. These are in addition to acquired risk factors (trauma and stasis). Primary care clinicians should consider these intrinsic risk factors in patients, especially those with recurrent disease. Prophylaxis may be indicated.

FITNESS

4-14 LOW CARDIORESPIRATORY FITNESS AND PHYSICAL INACTIVITY AS PREDICTORS OF MORTALITY IN MEN WITH TYPE 2 DIABETES

Another benefit of physical fitness. Primary care clinicians should constantly advise fitness as a cornerstone of treatment, not only for patients with diabetes, but for all.

6-23 EFFECT OF EXERCISE TRAINING ON LEFT VENTRICULAR FUNCTION AND PERIPHERAL RESISTANCE IN PATIENTS WITH CHRONIC HEART FAILURE

In patients with chronic stable HF, exercise training was associated with a reduction in peripheral resistance and a small, but significant improvement in stroke volume and a reduction in cardiomegaly.

7-15 ROLE OF EXERCISE TESTING AND SAFETY MONITORING FOR OLDER PERSONS STARTING AN EXERCISE PROGRAM.

Current guidelines regarding exercise stress testing are not applicable for the vast majority of older persons who are interested in restoring or enhancing their physical function through a program of physical activity and exercise. The goal should be not to deter older persons from participating, but to take prudent precautions.

"Relatively few persons aged 75 and older are capable of participating in vigorous or high intensity aerobic training."

FUTILITY

7-9 THE PATIENT'S RESPONSE TO FUTILITY

"Most treatments can be considered futile only within the context of an individual patient's goals for care. If a patient desires aggressive care, the patient is unlikely to consider many treatments futile, even treatments the physician believes are extremely unlikely to be beneficial."

7-10 THE RISE AND FALL OF THE FUTILITY MOVEMENT

"The judgement that further treatment would be futile is not a conclusion — a signal that care should cease. Instead it should initiate the difficult task of discussing the situation with the patient. The most recent attempts to establish a policy in this area have emphasized processes for discussion of futility rather than the means of implementing decisions about futility. Talking to patients and families should remain the focus of our efforts."

GASTRO-OESOPHAGEAL REFLUX DISEASE.

8-14 LONG-TERM SAFETY AND EFFICACY ON OMEPRAZOLE IN GASTRO-OESOPHAGEAL REFLUX DISEASE.

Long-term therapy was safe and effective. Patients with erosive esophagitis did well over 6 years.

GENERAL PRACTICE

2-9 GENERAL PRACTICE — TIME FOR A NEW DEFINITION

Primary care clinicians not only care for a patient's immediate health problems, but also must consider their social status and know how and when to engage community health resources for the patient's benefit. They prevent illness and palliate as well as attempting diagnosis and cure. Primary care is the most difficult of specialties. Clinicians must integrate biomedicine, medical psychology, and medical sociology. clinical outcomes by actively seeking patients' participation in the consultation and asking them to voice their expectations and preferences. BMJ February 19, 2000; 320:484-88

GENITAL HERPES

9-3 IMPROVING THE CARE OF PATIENTS WITH GENITAL HERPES

Many cases of genital herpes (**GH**) remain unrecognized. Patients may have symptoms and signs unrecognized by either themselves or their clinicians. "Patients often present having had frequent painful attacks for many years." This despite the availability of effective antiviral drugs.

Patients often believe that they are infectious only during symptomatic episodes despite evidence that most transmission occurs from asymptomatic shedding of the virus.

GERIATRICS

1-13 EFFECTS OF INFLUENZA VACCINATION OF HEALTH-CARE WORKERS ON MORTALITY OF ELDERLY PEOPLE IN LONG-TERM CARE

Vaccination of health-care workers was associated with a substantial decrease in mortality among frail elderly patients in hospitals.

GESTATIONAL DIABETES

$10\text{-}10\,$ A COMPARISON OF GLYBURIDE AND INSULIN IN WOMEN WITH GESTATIONAL DIABETES MELLITUS

Gyburide (*DiaBeta*; *generic*) is a clinically effective alternative to insulin in women with gestational diabetes. It is as safe as insulin.

GOUT

2-14 GOUT

Hyperuricemia is a common, but not obligatory feature of acute gout.

GRAVES' DISEASE

10-16 GRAVES' DISEASE

I enjoyed this review. I abstracted some points I felt needed emphasis, and some I did not know or had forgotten. RTJ

HEADACHE

10-4 DIAGNOSTIC VALUE OF HISTORICAL FEATURES IN PRIMARY HEADACHE SYNDROMES

The most sensitive clinical features for migraine are nausea, phonophobia, and photophobia. Foods, especially cheese and chocolate, are triggers for migraine. Aura, especially visual, predominate in migraine and when present establish the diagnosis.

TTHA, the most common HA, is recurring, pressing, and band-like with few migrainous features. Phonophobia, photophobia and nausea are not common. Stress and hunger are triggers.

Cluster HA is a distinct syndrome.

"A carefully taken history can establish the diagnosis of migraine, cluster or tension-type headache with sufficient confidence that no need will exist for additional evaluation."

HEART FAILURE

3-2 EFFECTS OF CONTROLLED-RELEASE METOPROLOL ON TOTAL MORTALITY,

HOSPITALIZATIONS, AND WELL-BEING IN PATIENTS WITH HEART FAILURE (MERIT-HF)

3-3 BETA-BLOCKER THERAPY FOR HEART FAILURE

An important addition to understanding benefits of beta-blockers in treatment of mild or moderate heart failure.

Metoprolol was associated with reduction in cardiovascular events and also improvement in quality of life and functional class.

Use of beta-blockers in treatment of heart failure has become a dominant part of standard therapy. (Another sea change.) Primary care physicians should be among those who prescribe them most often.

But, start low and go slow.

3-4 CONSUMPTION OF NSAIDs AND THE DEVELOPMENT OF CONGESTIVE HEART FAILURE IN ELDERLY PATIENTS.

Primary care clinicians should be mindful of, and responsive to, the important adverse effects of NSAIDs (including the new COX-2 inhibitors). Adverse effects on the GI tract, blood pressure, and renal function as well as cardiac function are a nationwide problem due to widespread use.

4-9 BIOCHEMICAL DIAGNOSIS IN VENTRICULAR FUNCTION IN ELDERLY PATIENTS IN GENERAL PRACTICE

Plasma natriuretic peptide levels increase in patients with left ventricular dysfunction. Normal concentrations in elderly patients suspected of heart failure, effectively "rules out" heart failure. Elevated levels do not "rule in" heart failure. There are other causes of elevated levels.

4-10 TREATMENT OF HEART FAILURE GUIDED BY PLASMA AMINOTERMINAL BRAIN NATRIURETIC PEPTIDE (N-BNP) CONCENTRATIONS.

Serial measurement of natriuretic peptides may lead to improved drug treatment of heart failure. Clinicians, keep alert for further developments.

4-11 A BRAIN NATRIURETIC PEPTIDE AS BRIDGE TO THERAPY FOR HEART FAILURE.

Not yet entered into primary care, but promising.

5-3 LONG-TERM ACE-INHIBITOR THERAPY IN PATIENTS WITH HEART FAILURE OR LEFT-VENTRICULAR DYSFUNCTION: A Systemic Overview Of Data From Individual Patients

A variety of ACE inhibitors reduce mortality, myocardial infarction, and hospital admission for heart failure in patients with left-ventricular dysfunction or heart failure, with or without a recent myocardial infarction. Benefits began within a week and continued for 3 years. Those with the greatest impairment in left ventricular function benefited the most. Use of ACE inhibitors should be a part of routine practice in these patients.

5-4 EFFECT OF LOSARTAN COMPARED WITH CAPTOPRIL ON MORTALITY IN PATIENTS WITH SYMPTOMATIC HEART FAILURE: RANDOMISED TRIAL — The Losartan Heart Failure Survival Study ELITE II

The angiotensin II blocker losartan was not superior to the ACE inhibitor captopril in improving survival of elderly heart failure patients. ACE inhibitors should be the initial treatment. Angiotensin II blockers may be useful if ACE inhibitors cannot be tolerated.

6-23 EFFECT OF EXERCISE TRAINING ON LEFT VENTRICULAR FUNCTION AND PERIPHERAL RESISTANCE IN PATIENTS WITH CHRONIC HEART FAILURE

In patients with chronic stable HF, exercise training was associated with a reduction in peripheral resistance and a small, but significant improvement in stroke volume and a reduction in cardiomegaly.

7-20 INTRAVENOUS NESIRITIDE: A Natriuretic Peptide In The Treatment Of Decompensated Congestive Heart Failure.

In patients hospitalized for treatment of decompensated CHF, the brain natriuretic peptide, nesiritide improved hemodynamic function and clinical status. "Intravenous nesiritide is useful for the short-term treatment of decompensated congestive heart failure."

7-13 DO PATIENTS WITH SUSPECTED HEART FAILURE AND PRESERVED LEFT VENTRICULAR SYSTOLIC FUNCTION SUFFER FROM "DIASTOLIC HEART FAILURE" OR FROM MISDIAGNOSIS? A Prospective Descriptive Study

For most patients referred with a diagnosis of heart failure but with preserved left ventricular systolic function, there is an alternative explanation for their symptoms. A diagnosis of diastolic heart failure was rarely needed. These alternative diagnoses should be rigorously sought and managed.

7-14 CAN HEART FAILURE BE DIAGNOSED IN PRIMARY CARE?

BNP determinations may make it easier to diagnose HF. When added to standard investigations by ECG and chest X-ray BNP may be helpful. Ie, may indicate HF when the ECG and X-ray are equivocal. The most likely initial application will be in triaging symptomatic adults to echocardiography on the basis of a positive test.

11-4 SAFETY AND COSTS OF INITIATING ANGIOTENSIN CONVERTING INHIBITORS FOR HEART FAILURE IN PRIMARY CARE: Analysis Of Individual Data From Studies Of Left Ventricular Dysfunction

ACE inhibitors delay progression and reduce mortality in patients with HF due to left ventricular systolic dysfunction.

These drugs are underused in primary care practice.

Fewer than 2% of patients receiving a small test dose of enalapril reported side effects severe enough to discontinue. (More likely in older patients with more severe HF).

Continuing the drug at gradually increasing doses for prevention or treatment of HF was safe — overall, no difference between enalapril and placebo in withdrawals.

Primary care clinicians should use ACE inhibitors routinely in patients with HF or a reduced ejection fraction.

HEAT STROKE

4-23 COOLING METHODS FOR HEATSTROKE VICTIMS

Method used by the American Armed Forces. Over 200 treated without a fatality. File for reference.

HELICOBACTER PYLORI

5-14 EFFECT OF POPULATION SCREENING AND TREATMENT FOR *HELICOBACTER PYLORI* ON DYSPEPSIA AND QUALITY OF LIFE IN THE COMMUNITY: A Randomized Controlled Trial

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5-15 HELICOBACTER PYLORI — IS IT A NOVEL CAUSATIVE AGENT IN VITAMIN B12 DEFICIENCY?

H pylori may be a causative agent in adult B12 deficiency — possibly by causing food-cobalamin malabsorption. Eradication of the infection without B12 supplementation led to normal serum B12 levels and cure of the anemia.

5-16 LINKS BETWEEN HELICOBACTER PYLORI INFECTION, COBALAMIN DEFICIENCY, AND PERNICIOUS ANEMIA.

There are many causes of B12 deficiency, pernicious anemia and food-cobalamin malabsorption the 2 main causes. Primary care clinicians may keep in mind the possibility that H pylori may underlie B12 deficiency.

HEMOLYTIC-UREMIC SYNDROME

6-15 THE RISK OF THE HEMOLYTIC-UREMIC SYNDROME AFTER ANTIBIOTIC TREATMENT OF ESCHERICHIA COLI 0157:H7 INFECTIONS

Antibiotic treatment of children with *E coli* O157-H7 increased risk of the hemolytic-uremic syndrome by releasing Shiga toxin from the enteric pathogens. The toxin is absorbed, causing the syndrome.

HEPATITIS

1-18 45-YEAR FOLLOW-UP OF HEPATITIS C INFECTION IN HEALTHY YOUNG ADULTS

Over 45 years 17 HCV positive persons had a low liver-disease related morbidity and mortality. Only 2 (12%) developed liver disease. "This suggests that healthy HCV-positive persons may be at less risk for progressive liver disease than is currently thought." *Annals Int Med* January 18, 2000; 132: 105-11

12-12 PEGINTERFERON ALFA-2A IN PATIENTS WITH CHRONIC HEPATITIS C

In patients with chronic HC, a regimen of peginterferon-alfa (interferon combined with polyethylene glycol) given once weekly was more effective than interferon alfa-2a given 3 times weekly.

This compound has sustained absorption, a slower rate of clearance, and a longer half-life than unmodified interferon. This maintains an antiviral effect on hepatitis C virus (**HCV**) and makes possible a once-weekly administration.

HOMOSEXUALITY 6-12 SUICIDAL BEHAVIOR IN GAY, LESBIAN, AND BISEXUAL YOUTH

Youths who feel that they are gay must either hide their feelings from others for many years or face the risks of "coming out". Either course is perilous. For some, one consequence of the confusion over their identity in a climate of intense intolerance and victimization may be suicidal behavior.

Epidemiologic studies in North America, and New Zealand show that gay and bisexual males are at least four times as likely to report a serious suicide attempt.

HORMONE REPLACEMENT THERAPY 1-10 MENOPAUSAL ESTROGEN AND ESTROGEN-PROGESTIN REPLACEMENT THERAPY AND BREAST CANCER RISK

Hormone replacement therapy with estrogen-progestin increased risk of breast cancer beyond that of estrogen alone. *JAMA* January 26, 2000; 283; 485-491

1-11 POSTMENOPAUSAL ESTROGENS - OPPPOSED, UNOPPOSED, OR NONE OF THE ABOVE

The risks of BC due to HT use are determined by duration of use. Short-term use (eg, 2 to 3 years) for relief of menopausal symptoms should not be influenced by fear of BC.

The editorialist tilts toward lifestyle measures as first line therapy, and suggests this may be all that is needed to preserve bone mass. This begs the question — will drug therapy add to the benefits of a high-quality and sustained lifestyle? *JAMA* January 26, 2000; 283: 534-35

2-15 ESTROGEN REPLACEMENT THERAPY FOR TREATMENT OF MILD TO MODERATE ALZHEIMER DISEASE

A negative study contradicting previous reports. Self-correcting the scientific literature is essential to continue trust from the public as well as clinicians. With constant correction and up-dating, ultimately the scientific approach to medicine is strengthened. JAMA February 23, 2000; 283: 1007-15

12-8 A PROSPECTIVE, OBSERVATIONAL STUDY OF POSTMENOPAUSAL HORMONE THERAPY AND PRIMARY PREVENTION OF CARDIOVASCULAR DISEASE.

"In this large, observational, prospective study, the risk of major coronary events appeared to be substantially decreased among current users of hormone therapy."

Among women taking oral conjugated estrogen (eg, Premarin) the risk reduction was similar in those taking 0.3 mg/d and 0.625 mg/d. (RR = 0.54 and 0.58 compared with never-users.)

Primary care clinicians might be more willing to begin prescribing *Premarin* at the 0.3 mg dose. It would be reasonable to consider that breast and ovarian cancer may be lower in women taking this dose.

HOT FLASHES

5-20 ORAL CLONIDINE IN POSTMENOPAUSAL PATIENTS WITH BREAST CANCER EXPERIENCING TAMOXIFEN-INDUCED HOT FLASHES

An occasional patient may be relieved of very troublesome symptoms by a medication with low toxicity.

HUMAN PAPILLOMAVIRUS

6-13 QUANTITATIVE TESTS FOR HUMAN PAPILLOMAVIRUS

Squamous-cell carcinoma of the cervix is thought to arise from squamous intraepithelial lesions. The degree of thickness of the epithelial changes reflects the relative potential for development of invasive carcinoma.

Human papilloma virus is strongly associated with cervical cancer. HPV16 is often the associated strain. The prevalence of latent HPV infection is about 40%; 5-10% of these patients will develop SIL; and 1% or less will develop cancer.

HYPERPARTHYROIDISM

4-12 SURGERY FOR PRIMARY HYPERPARATHYROIDISM — SOONER RATHER THAN LATER.

Practical advice. Early surgery is advised.

HYPERTENSION

3-1 RISKS OF UNTREATED ISOLATED SYSTOLIC HYPERTENSION IN THE ELDERLY

A recent sea change. Understanding the risks of isolated systolic BP (defined arbitrarily as systolic > 160 with diastolic < 95) has changed our approach to treatment. Isolated systolic BP is more predictive of future cardiovascular events than elevated diastolic. Indeed, when combined with a high systolic, a low diastolic (with the associated increase in pulse pressure) *increases* risk.

Drug treatment of systolic BP over 160 in older individuals effectively reduces risk and is indicated regardless of diastolic BP.

Primary care physicians have the responsibility of recognizing and opportunity of treating isolated systolic BP in their elderly patients.

4-19 USE AND INTERPRETATION OF AMBULATORY BLOOD PRESSURE MONITORING: Recommendations of The British Hypertension Society.

A review article. "There is now firm evidence that ambulatory blood pressure monitoring is a more sensitive predictor of cardiovascular outcome than conventional measurement." Primary care practices should make ABPM available to their patients.

7-16 RANDOMISED TRIAL OF EFFECTS OF CALCIUM ANTAGONISTS COMPARED WITH DIURETICS AND BETA-BLOCKERS ON CARDIOVASCULAR MORBIDITY AND MORTALITY IN HYPERTENSION: The Nordic Diltiazem (NORDIL) Study

Two regimens, one based on the calcium antagonist diltiazem and the other on diuretics, beta-blockers, or both, were equally effective in preventing a combined endpoint of stroke, myocardial infarction, and cardiovascular death over 5 years.

7-17 MORBIDITY AND MORTALITY IN PATIENTS RANDOMISED TO DOUBLE-BLIND TREATMENT WITH A LONG-ACTING CALCIUM-CHANNEL BLOCKER OR DIURETIC IN THE INTERNATIONAL NIFEDIPINE GITS STUDY: Intervention As A Goal In Hypertension Treatment (INSIGHT)

The calcium antagonist nifedipine and co-amiloride (combined diuretic-potassium-sparing drug) were equally effective in preventing overall cardiovascular or cerebrovascular events.

The choice of drug can be decided by cost, tolerability and BP response rather than long-term safety.

7-18 DIFFERENCES BETWEEN BLOOD-PRESSURE-LOWERING DRUGS

The preceding 2 trials demonstrated *no difference* in outcomes between diuretic/beta-blocker based regimens and calcium channel blocker based regimens. Any differences were of marginal significance.

7-2 EFFECT OF TREATING ISOLATED SYSTOLIC HYPERTENSION ON THE RISK OF DEVELOPING VARIOUS TYPES AND SUBTYPES OF STROKE: The Systolic Hypertension In The Elderly Program (SHEP)

Treatment induced a significant reduction in the incidence of all strokes in patients with isolated systolic hypertension.

Antihypertensive drug treatment which reached the goals of the study (<160 mm Hg) reduced the incidence of both hemorrhagic and ischemic (including lacunar) stroke.

8-6 CONTROLLING GLUCOSE AND BLOOD PRESSURE IN TYPE 2 DIABETES.

The clinical message is clear and important. To avoid complications control the HbA1c as close to 6% as possible and the systolic BP as low as possible. We must ask whether treatment to lower raised glucose should be started much earlier. Perhaps impaired glucose tolerance should be an indication for treatment.

9-9 HIGH BLOOD PRESSURE AND DIABETES MELLITUS

Intensive control of BP in patients with combined diabetes-hypertension to levels below 135/85 reduces risk of cardiovascular events. All 4 drug classes — diuretics, beta-blockers, ACE inhibitors, and calcium blockers — are effective.

Most patients will require combined therapy to obtain BP goal of 130/85

12-4 RANDOMISED CONTROLLED TRIAL OF DUAL BLOCKADE OF RENIN-ANGIOTENSIN SYSTEM IN PATIENTS WITH HYPERTENSION, MICROALBUMINURIA, AND NON-INSULIN-DEPENDENT DIABETES

The ACE-inhibitor lisinopril and the angiotensin II blocker candesartan were equally effective in reducing BP and albumin excretion in diabetic patients with hypertension and microalbuminuria.

When the 2 drugs were combined, BP and albuminuria were further improved.

Combination treatment was well tolerated.

12-2 HEALTH OUTCOMES ASSOCIATED WITH CALCIUM ANTAGONISTS COMPARED WITH OTHER FIRST-LINE ANTIHYPERTENSIVE THERAPIES

"Low-dose diuretics, which have proven efficacy and low cost, should continue to be the standard therapy for hypertension." The use of long-acting calcium antagonists should be limited to patients who do not tolerate or do not respond to diuretics, beta-blockers, or ACE inhibitors.

12-3 SELECTION OF INITIAL ANTIHYPERTENSIVE DRUG THERAPY

Diuretics and beta-blockers should be used as first-line therapy of uncomplicated hypertension. ACE inhibitors may be especially useful in patients with high risk of heart failure. Caution is needed in recommending calcium antagonists as initial therapy in populations at high risk of coronary heart disease and heart failure.

HYPOTENSION

10-14 UPRIGHT POSTURE AND POSTPRANDIAL HYPOTENSION IN ELDERLY PERSON

Meal ingestion was significantly related to a fall in systolic BP in elderly persons. After the meal, 22% had resultant symptomatic hypotension (systolic < 80 mm Hg) vs 12% when tested before the meal.

The problem of post-prandial hypotension and syncope leading to falls is common in nursing home patients. We should take care to keep individuals with this risk sedentary or recumbent for a time after meals, not allowing them to rise quickly.

INFECTIOUS DISEASE

1-16 POTENTIAL RISK OF CROSS-INFECTION DURING PERIPHERAL-VENOUS ACCESS BY CONTAMINATION OF TOURNIQUETS

Many tourniquets were contaminated with blood. On culture, a high percentage grew out pathogenic bacteria.

This presents a risk of transmission of bacterial as well as viral infections. "We recommend the use of disposable tourniquets."

INFLUENZA

1-13 EFFECTS OF INFLUENZA VACCINATION OF HEALTH-CARE WORKERS ON MORTALITY OF ELDERLY PEOPLE IN LONG-TERM CARE

Vaccination of health-care workers was associated with a substantial decrease in mortality among frail elderly patients in hospitals.

2-1 EFFICACY AND SAFETY OF THE ORAL NEURAMINIDASE INHIBITOR OSELTAMIVIR IN TREATING ACUTE INFLUENZA.

Oseltamivir is effective and thus far safe in treating naturally acquired influenza. The question is when to use it and for whom to use it. Many patients with flu-like symptoms do not have flu. Presence of influenza in the community must be confirmed. Possible indications for use: in the elderly whose immune response to vaccine is suboptimal, for nursing home residents (to reduce likelihood of contagion), during epidemics in which vaccine may be ineffective when antigenically novel viruses appear.

10-5 PREVENTING INFLUENZA IN HEALTHY ADULTS: The Evolving Story

Flu vaccine for healthy adults will prevent influenza in some individuals each year. The absolute number will vary with the severity of the epidemic and the match between the native influenza virus and the vaccine virus.

Healthy health care workers should take vaccine every year.

INFORMATIONIST

6-9 THE INFORMATIONIST: A NEW HEALTH PROFESSION?

The editorialist suggests development of a program, modeled on the experience of clinical librarianship, to train, credential, and pay for the services of information specialists. These new professionals might be called "informationists". Informationists must have a clear and solid understanding of both information science and the essentials of clinical work. They must learn the practical working skills of retrieving, synthesizing, and presenting medical information and the skills of functioning in a clinical care team.

INSULIN

5-6 INSULIN GLARGINE

This new long-acting insulin analogue (now approved by the FDA) supplies basal insulin requirements throughout 24 hours. By mimicking nature, use of an insulin with a peakless action profile should improve blood glucose control. Combining insulin glargine with short-acting insulins at mealtime should optimize control.

INTERLEUKIN-1 INTERLEUKIN-1-RECEPTOR ANTAGONIST

9-15 THE ROLE OF THE INTERLEUKIN-1-RECEPTOR ANTAGONIST IN BLOCKING INFLAMMATION MEDIATED BY INTERLEUKIN-1

The increased production of the cytokine interleukin-1 during an inflammatory disease contributes to the pathologic process by binding to and triggering its receptor. Normally enough IL-1 receptor antagonist is produced to hold the interleukin-mediated inflammation at bay. In cases of runaway inflammation there is an insufficient amount of IL-1-receptor antagonist to control the activity of IL-1. Administration of exogenous IL-1RA should ameliorate inflammatory disease.

LIFESTYLE

7-3 PRIMARY PREVENTION OF CORONARY HEART DISEASE IN WOMEN THROUGH DIET AND LIFESTYLE

Among women, adherence to lifestyle guidelines involving diet, exercise, and abstinence from smoking was associated with a very low risk of coronary heart disease.

LIKELIHOOD RATIOS

3-10 LIKELIHOOD RATIOS

The second step in the analysis of the value of diagnostic tests. Understanding increases the enjoyment of reading the journals.

LIPIDS

2-10 CHOLESTEROL AND STROKES

Primary care clinicians have the responsibility and opportunity to reduce the incidence and progression of carotid atherosclerosis by lipid control, especially by use of statin drugs. As a result, incidence of embolic stroke can be reduced. BMJ February 19, 2000; 320: 459-604-

3-5 PLANT STEROL AND STANOL MARGARINES AND HEALTH

These sterols, added to margarine and other fat foods, inhibit absorption of both dietary and biliary cholesterol, resulting in significant lowering of LDL-cholesterol. They can be an important addition to lipid control in select patients who enjoy the taste, can afford the cost, and use them regularly. They are non-toxic. 4

4-6 SERUM LIPID EFFECTS OF HIGH-MONOUNSATURATED FAT DIET BASED ON MACADAMIA NUTS.

Nuts, used as a snack, would improve lipid patterns. Clinicians should emphasize the beneficial effects of nuts (in place of the usual sweets and pastries) for patients without weight problems.

7-4 RELATIONSHIPS OF BASELINE SERUM CHOLESTEROL LEVELS IN 3 LARGE COHORTS OF YOUNGER MEN TO LONG-TERM CORONARY, CARDIOVASCULAR AND ALL-CAUSE MORTALITY AND LONGEVITY.

There was a continuous, graded, long-term relationship between baseline cholesterol levels at ages 18-39 and long-term risk of CHD and CVD

There was substantial absolute risk and absolute excess risk of CHD and CVD death for these younger men. And a longer estimated life expectancy for younger men with favorable levels.

7-5 EARLY DETECTION OF HIGH CHOLESTEROL LEVELS IN YOUNG ADULTS

It is clear "... that early detection of high serum cholesterol levels is a necessary first step in the effort to reduce risk of CHD in the one third of young adults who have total cholesterol levels higher than 200 mg/dL" "The current evidence supports recommendations for measurement of cholesterol levels in adults aged 20 years or older once every 5 years."

9-7 CHANGES IN DIET, WEIGHT, AND SERUM LIPID LEVELS ASSOCIATES WITH OLESTRA CONSUMPTION.

Consumption of olestra, a new fat substitute, was associated with benefits on lipid profiles and a reduction in total fat intake. Changes in LDL- and HDL-cholesterol were clinically significant. RTJ

10-6 USE OF LIPID LOWERING DRUGS FOR PRIMARY PREVENTION OF CORONARY HEART DISEASE: Meta-Analysis of Randomized Trials

Treatment with lipid controlling drugs over 5 to 7 years reduced coronary heart disease events in persons with no known cardiovascular disease. (Primary prevention)

National Guidelines have suggested starting primary prevention treatment in persons with a 3% annual risk of CHD events. But the decision to take drugs depends to a large extent on personal preference. Clinicians should assess risks in each patient and if they are considered at higher risk than average, should inform them of the benefit/harm-cost ratio to guide their individual decision. Statin drugs are costly. RTJ

10-7 STATINS: UNDERUSED BY THOSE WHO WOULD BENEFIT

Statins are effective, easy to take, and relatively safe (*and very expensive*). Many people who would benefit from taking them are not doing so. Underuse is most apparent in the *secondary* prevention of heart disease in patients with known atherosclerotic disease for whom there is overwhelming evidence that statins are highly beneficial. Treatment should start as soon as a clinical diagnosis is made.

Undertreatment is also a problem for the larger population of people who do not have manifest atherosclerotic disease (*primary* prevention). "There is no longer any doubt that statin treatment benefits those who are at substantial coronary risk but do not have established atherosclerotic disease.

. In practice, clinicians might consider treatment for those of younger age who have strong risk factors such as familial hypercholesterolemia or diabetes. Problems include cost and issues of long-term safety, although statins are reasonably safe and less likely to cause serious harm than aspirin.

For primary prevention of persons at higher than average risk of atherosclerotic events, MDs should explain the benefit/harm-cost ratio to each individual and allow him/her to make a personal informed choice.

LIVER ENZYMES

4-7 EVALUATION OF ABNORMAL LIVER-ENZYME RESULTS IN ASYMPTOMATIC PATIENTS.

Reference article. Practical advice when elevated liver enzymes are reported on a screening panel.

LOW MOLECULAR WEIGHT HEPARIN

4-4 LOW MOLECULAR WEIGHT HEPARIN VERSUS ASPIRIN IN PATIENTS WITH ACUTE ISCHEMIC STROKE AND ATRIAL FIBRILLATION

Another boost for regular use of aspirin immediately after AF-related embolic stroke and continued for 2 weeks. Just as beneficial as heparin and more acceptable, easier to use, and much cheaper.

LUNG CANCER

10-11 SCREENING STRATEGIES FOR EARLY DETECTION OF LUNG CANCER

The editorialist argues that with CT scanning and improved cytology, many lung cancers can be diagnoses at an early stage and cured.

"Now is the time to screen for early-stage lung cancer." Screening heavy smokers with airflow obstruction with sputum cytology testing for central lesions and CT for peripheral lesions can identify and harvest the "low hanging fruit".

10-12 ROUTINE SCREENING FOR LUNG CANCER?

Lead Time Bias; Length Time Bias; Contamination Of The Control Population; Overdiagnosis

There is not enough data to predict the benefit/harm-cost ratio of routine screening for LC. This commentator argues that screening is not of proven benefit. There are too many biases in the way of proof.

On an individual basis, patients at high risk (long-time smokers with decreased FEV1) may be made aware of the benefits, harms, and costs of screening, and be given the opportunity to choose for themselves.

See the original for a definition of lead-time bias, length-time bias, overtreatment, and contamination of the control population.

LYME DISEASE

2-16 LONG-TERM OUTCOMES OF PERSONS WITH LYME DISEASE

2-17 LONG-TERM OUTCOMES AND MANAGEMENT OF PATIENTS WITH LYME DISEASE

Patients who have been suspected of having Lyme disease and continue to experience non-specific symptoms present a "doctor's dilemma". Uncertainty breeds strong disparate opinions. Should these individuals receive antibiotics as a therapeutic trial? The Infectious Disease Society of America says no.

MALARIA

6-14 MALARIA CHEMOPROPHYLAXIS WITH TAFENOQUINE: A Randomised Study

Tafenoquine is a new synthetic analogue of primaquine, with an improved therapeutic index and safety profile. It is many times more potent than primaquine against both liver and blood stages of the parasite. It has a much longer half-life than primaquine (14 days vs 6 hours).

Tafenoquine was effective and well tolerated in the prophylaxis of malaria.

7-21 DDT HOUSE SPRAYING AND RE-EMERGING MALARIA

"We recommend that the global response to burgeoning malaria rates should allow for DDT residual house spraying where it is known to be effective and necessary."

8-20 RAPID DIAGNOSIS OF FALCIPARUM MALARIA BY USING THE *PARA*SIGHT F TEST IN TRAVELERS RETURNING TO THE UNITED KINGDOM

This simple diagnostic strip test detects a water soluble antigen (histidine rich protein 2) produced by blood stages of *P falciparum*. The test is simple and rapid. And has high predictive values.

MEDICAL HISTORY

1-21 LOOKING BACK ON THE MILLENNIUM IN MEDICINE

The editors of NEJM choose the most important developments in clinical medicine over the past millennium — 11 in all. Which ones would you choose?

MEDICATION TAKING

6-17 THE LANGUAGE OF MEDICATION-TAKING

The editorialist argues that the terms "compliance" and "adherence" are problematic. They exaggerate the physician's control over the process of taking medications and imply that the patient must take the medication as prescribed to obtain benefit. The terms "non-compliance" and "non-adherence" create a clinically unjustifiable distinction between persons who take all of their pills as prescribed and those who deviate form the prescription in any way.

The terms are problematic because they imply that the physician developed the therapeutic plan unilaterally rather than through two-way negotiation with the patient. "Patients base decisions about taking medications on many considerations besides their physician's advice." "Our role is limited to education and advice."

MELATONIN

10-15 MELATONIN, CIRCADIAN RHYTHMS, AND SLEEP

Disturbances in circadian rhythms often result in disturbances in sleep. Some examples; jet lag; shift work; and the sleep disorders that occur in totally blind persons with free-running circadian rhythms (ie, rhythms that are not synchronized to the 24-hour day). The hormone melatonin can be used both to characterize and treat such disorders.

MENINGITIS.

5-21 GUIDELINES FOR MANAGING ACUTE BACTERIAL MENINGITIS.

The British Infection Society has issued guidelines making recommendations for management of suspected or diagnosed acute bacterial meningitis and meningococcal disease, and for prevention of secondary cases by vaccination and prophylactic antibiotic treatment. "In patients with obvious meningococcal disease penicillin is the drug of choice."

MENINGOCOCCAL DISEASE

3-13 CHANGING CARRIAGE RATE of *NEISSERIA MENINGITIDIS* AMONG UNIVERSITY STUDENTS DURING THE FIRST WEEK OF TERM

Carriage rates of meningococci among university students increases rapidly during the first week of the term, and increases further during the term. Your college student child should avoid smoking, crowding, and intimacy as much as possible. A case can be made for immunization. We should be alert to the possibility of invasive disease when a healthy student becomes suddenly and seriously ill, and be prepared to administer intramuscular penicillin based on clinical suspicion, without waiting for diagnostic confirmation.

MENTAL ILLNESS

11-10 SMOKING AND MENTAL ILLNESS: A Population-Based Prevalence Study

Persons with mental illness were about twice as likely to smoke as persons without mental illness. Primary care clinicians should consider smoking a possible marker for mental illness, especially in those who start at an early age.

MIGRAINE

11-13 STRATIFIED CARE VS STEP CARE STRATEGIES FOR MIGRAINE.

Go at once to the most effective therapy based on individual trial and error experience.

MONOCLONAL ANTIBODIES

3-16 THERAPEUTIC MONOCLONAL ANTIBODIES

These agents are being investigated as therapeutic agents for rheumatoid arthritis, Crohn's disease, anti-platelet activity, and antiviral activity. Application may be widespread. Primary care clinicians stay alert for developments.

MYOCARDIAL INFARCTION

5-22 DOUBTS RAISED ABOUT SAFETY OF THROMBOLYSIS IN ELDERLY

Doubts raised about safety of thrombolysis in patients age over 75 given for treatment of acute myocardial infarction. Lower doses of the thrombolytic agent combined with a platelet glycoprotein IIb/IIIa inhibitor may be safer.

8-2 RATE OF HEART FAILURE AND 1-YEAR SURVIVAL FOR OLDER PEOPLE RECEIVING LOW-DOSE BETA-BLOCKER THERAPY AFTER MYOCARDIAL INFARCTION

Beta-blockers are standard therapy for patients with heart failure. Compared with high-dose beta-blocker therapy, low-dose treatment was associated with a lower rate of hospital admission for heart failure. Patients receiving a low dose had a similar 1-year survival benefit.

A low dose would be atenolol 25 mg daily.

The potential survival benefit of low-dose BBs may encourage physicians to use these drugs in frail elderly people for whom BBs might not be prescribed. The group receiving low-dose BB included those who were older and most frail. This group may receive the most benefit from low-dose therapy.

NATRIURETIC PEPTIDES

1-12 RISK ASSESSMENT OF LEFT VENTRICULAR SYSTOLIC DYSFUNCTION IN PRIMARY CARE: Cross Sectional Study Evaluating A Range of Diagnostic Tests

A normal electrocardiogram implies a low risk of left ventricular systolic dysfunction. An abnormal ECG combined with either a high atrial natriuretic peptide or a resting heart rate greater than diastolic BP, or both, identified patients with left ventricular systolic dysfunction.

4-9 BIOCHEMICAL DIAGNOSIS IN VENTRICULAR FUNCTION IN ELDERLY PATIENTS IN GENERAL PRACTICE

Plasma natriuretic peptide levels increase in patients with left ventricular dysfunction. Normal concentrations in elderly patients suspected of heart failure, effectively "rules out" heart failure. Elevated levels do not "rule in" heart failure. There are other causes of elevated levels.

4-10 TREATMENT OF HEART FAILURE GUIDED BY PLASMA AMINOTERMINAL BRAIN NATRIURETIC PEPTIDE (N-BNP) CONCENTRATIONS.

Serial measurement of natriuretic peptides may lead to improved drug treatment of heart failure. Clinicians, keep alert for further developments.

4-11 A BRAIN NATRIURETIC PEPTIDE AS BRIDGE TO THERAPY FOR HEART FAILURE.

Not yet entered into primary care, but promising.

NSAIDs

3-4 CONSUMPTION OF NSAIDs AND THE DEVELOPMENT OF CONGESTIVE HEART FAILURE IN ELDERLY PATIENTS.

Primary care clinicians should be mindful of, and responsive to, the important adverse effects of NSAIDs (including the new COX-2 inhibitors). Adverse effects on the GI tract, blood pressure, and renal function as well as cardiac function are a nationwide problem due to widespread use.

NUTS

4-6 SERUM LIPID EFFECTS OF HIGH-MONOUNSATURATED FAT DIET BASED ON MACADAMIA NUTS.

Nuts, used as a snack, would improve lipid patterns. Clinicians should emphasize the beneficial effects of nuts (in place of the usual sweets and pastries) for patients without weight problems.

OBESITY

3-14 A PROSPECTIVE STUDY OF HOLIDAY WEIGHT GAIN

The weight gain during the holiday season averages about a pound. The problem is — we do not lose the pound during the rest of the year. Weight gradually increases over the years. If we do not wish to avoid holiday food and cheer, we should make a conscious effort to increase activity during the season.

9-10 OBESITY SURGERY — ANOTHER UNMET NEED

For patients with morbid obesity (BMI > 40; weight in kg / height in meters²) a conservative approach to weight control is doomed to failure.

Good results have been obtained from surgery (banding gastroplasty; gastric bypass) in these patients. Comorbidity decreases as a result of even modest weight loss. The National Institute of Health in the United States has suggested that surgery is the most effective treatment for selected patients who are morbidly obese.

12-16 EFFECT OF SIBUTRAMINE ON WEIGHT MAINTENANCE AFTER WEIGHT LOSS

An individualized management program with sibutramine and diet achieved weight loss in 77% of obese patients, and sustained the weight loss in most patients continuing therapy with sibutramine for 2 years.

OLESTRA

9-7 CHANGES IN DIET, WEIGHT, AND SERUM LIPID LEVELS ASSOCIATES WITH OLESTRA CONSUMPTION.

Consumption of olestra, a new fat substitute, was associated with benefits on lipid profiles and a reduction in total fat intake. Changes in LDL- and HDL-cholesterol were clinically significant. RTJ

OSTEOARTHRITIS

2-2 EFFECTIVENESS OF MANUAL PHYSICAL THERAPY AND EXERCISE IN OSTEOARTHRITIS OF THE KNEE

An enthusiastic cooperative effort between physiotherapist and primary-care clinician will delay or prevent need for surgery

3-19 GLUCOSAMINE AND CHONDROITIN FOR TREATING SYMPTOMS OF OSTEOARTHRITIS

The mechanism of action is not known, purity of compounds available not established, and toxicity not defined. The authors conclude, nevertheless, that there may be some benefit in symptomatic management. Primary care physicians should not prescribe them. But, what to do when a patient who is taking them reports benefit?

OSTEOPOROSIS

6-6 INHIBITORS OF HYDROXYMETHYLGLUTARYL-COENZYME A REDUCTASE AND RISK OF FRACTURE AMONG OLDER WOMEN.

Statin drugs seemed to be protective against non-pathological fractures among older women.

6-7 ORAL STATINS AND INCREASED BONE-MINERAL DENSITY IN POSTMENOPAUSAL WOMEN.

Bone mineral density remained significantly higher in the statin users after adjustment for age, height, and weight

8-3 ALENDRONATE FOR THE TREATMENT OF OSTEOPOROSIS IN MEN.

In men with osteoporosis, alendronate significantly increased BMD and helped prevent vertebral fractures and decreases in height.

10-3 LOW-DOSE HYDROCHLOROTHIAZIDE AND PRESERVATION OF BONE MINERAL DENSITY IN OLDER ADULTS

Low-dose hydrochlorothiazide given for 3 years preserved BMD. Low-dose thiazides are still considered the first choice anti-hypertensives — preservation of BMD is an added benefit.

PANIC DISORDER

5-7 PANIC DISORDER —IT'S REAL AND IT'S TREATABLE

Treatment with the tricyclic antidepressant imipramine, combined with psychotherapy was superior to placebo. Drug treatment works best in the context of a therapeutic patient-physician relationship. "It is essential that primary care physicians recognize PD, make the diagnosis after appropriate evaluation, inform patients that they have a very real disorder that can be treated effectively, and assist them in obtaining appropriate treatment."

3-22 PEDICULOSIS

A review. Permethrin and lindane are reasonable choices for local application.

PEPTIC ULCER

8-17 EFFECT OF INTRAVENOUS OMEPRAZOLE ON RECURRENT BLEEDING AFTER ENDOSCOPIC TREATMENT OF BLEEDING PEPTIC ULCERS

After endoscopic treatment of active bleeding from a peptic ulcer, high-dose omeprazole given iv substantially reduced risk of rebleeding.

PERIPHERAL VASCULAR DISEASE

5-18 SECONDARY PREVENTION OF PERIPHERAL VASCULAR DISEASE

Peripheral arteriosclerosis is always associated with atherosclerotic disease elsewhere. It is a valid marker for coronary, renal, and carotid disease. They share the same risk factors and treatment

9-12 HORMONE REPLACEMENT THERAPY AND PERIPHERAL ARTERY DISEASE

In this population-based study, postmenopausal women who took HRT for a year or more had a decreased risk of PAD.

PNEUMOCOCCAL DISEASE

3-11 CIGARETTE SMOKING AND INVASIVE PNEUMOCOCCAL DISEASE

3-12 SMOKING AND PNEUMOCOCCAL DISEASE

In immunocompetent individuals, smoking is a strong, independent risk factor for invasive pneumococcal disease. "It may be reasonable to incorporate pneumococcal vaccine into smoking cessation programs as well as to consider vaccinating those who continue to smoke." (Immuno-incompetent individuals [eg, HIV-infected] are also at high risk.)

POLYCYSTIC OVARY SYNDROME

6-16 THE IMPORTANCE OF DIAGNOSING POLYCYSTIC OVARY SYNDROME

"Diagnosis is extremely important because it identifies risk of potential metabolic and cardiovascular diseases." Reduction in insulin resistance should be a mainstay of any long-term strategy — exercise, diet, and insulin-sensitizing agents (eg, metformin) have been shown to improve risk factors. Low-dose oral contraceptives can be used to treat the characteristic menstrual irregularity and are known to reduce risk for endometrial as well as ovarian cancer.

POST HERPETIC NEURALGIA.

11-1 INTRATHECAL METHYLPREDNISOLONE FOR INTRACTABLE POST HERPETIC NEURALGIA.

Intrathecal administration of methylprednisolone was an effective treatment for severe, persistent PHN.

11-2 A NEW TREATMENT FOR POSTHERPETIC NEURALGIA

The editorialist, an experienced observer of PHN, comments that treatment should start with the simplest and safest approaches (see text). However, he found the results of the trial remarkable. Replication is necessary.

Primary care clinicians may be willing to consult with expert anesthesiologists to ask their opinion and willingness to try this new procedure in a highly distressed patient.

PRACTICE OF MEDICINE (THE ART)

5-5 HOW TO IMPROVE COMMUNICATION BETWEEN DOCTORS AND PATIENTS

There are 3 distinct approaches to treatment decision-making that doctors can make. Each has different implications for the roles of doctors and patients in communicating information, and the type, amount, and flow of information between the two: 1) the paternalistic approach, 2) the informed approach, and 3) the shared approach. In the 3rd approach, doctors commit themselves to an interactive relationship with patients in developing a treatment recommendation that is consistent with patient values and preferences.

PREDICITVE VALUES

2-6 SENSITIVITY, SPECIFICITY, PREDICTIVE VALUES.

Editor's review of results of tests based on the preceding article: sensitivity, specificity, predictive value of a positive test, predictive value of a negative test. Calculations are simple and fun, but tricky.

PREMENSTRUAL SYNDROME

9-1 EFFICACY OF SELECTIVE SEROTONIN-REUPTAKE INHIBITORS IN PREMENSTRUAL SYNDROME SSRIs are safe and effective first-line therapy for severe PMS.

9-2 RECOGNITION OF PREMENSTRUAL DYSPHORIC DISORDER AND ITS TREATMENT

Several features suggest that PMDD is distinct from other mood disorders. The dysphoria is cyclical, the physical symptoms unique (breast tenderness and bloating the most common) and tightly linked to phases of the cycle. There is a typical and predictable "on-offness". Symptoms disappear with the menopause and pregnancy. Suppression of the cyclicity of gonadal hormones can bring relief. Hormone replacement therapy can provoke recurrence of symptoms in women with a past history of PMDD.

PREOPERATIVE MEDICAL TESTING

1-15 THE VALUE OF PREOPERATIVE MEDICAL TESTING BEFORE CATARACT SURGERY

Routine medical testing before cataract surgery did not increase the safety of the surgery. *NEJM* January 20,2000;342:168-75

PRE-TEST; POST-TEST PROBABILITY

4-8 PRE-TEST PROBABILITY; POST-TEST PROBABILITY

The third step in the analysis of the probability that a diagnostic test is valid. Understanding sensitivity, specificity, predictive values, and pre- and post-test probabilities clarifies many aspects of current studies, and makes journal reading more enjoyable.

PROSTATE CANCER

1-14 URINARY AND SEXUAL FUNCTION AFTER RADICAL PROSTATECTOMY FOR CLINICALLY LOCALIZED PROSTATE CANCER.

Radical prostatectomy was associated with significant erectile dysfunction and some decline in urinary function.

PROSTATECTOMY

1-14 URINARY AND SEXUAL FUNCTION AFTER RADICAL PROSTATECTOM FOR CLINICALLY LOCALIZED PROSTATE CANCER.

Radical prostatectomy was associated with significant erectile dysfunction and some decline in urinary function.

PROSTATITIS:

9-18 DIAGNOSIS AND TREATMENT OF CHRONIC ABACTERIAL PROSTATITIS: A Systematic Review

No standard diagnostic tests. Treatment trials were weak. The routine use of antibiotics and alpha-blockers to treat chronic abacterial prostatitis is not supported by the existing evidence.

RECOMMENDED READING

- 2-4 MISUNDERSTANDINGS IN PRESCRIBING DECISIONS IN GENERAL PRACTICE
- 2-11 SHOULD DOCTORS GET CME POINTS FOR READING?
- 3-7 DEATH AND THE RESEARCH IMPERATIVE
- 5-5 HOW TO IMPROVE COMMUNICATION BETWEEN DOCTORS AND PATIENTS
- 5-24 VIOLENCE IN PUBLIC HEALTH AND PREVENTIVE MEDICINE

- 5-9 IN SEARCH OF A GOOD DEATH6-17 THE LANGUAGE OF MEDICATION-TAKING
- 6-21 PHYSICIAN AND PATIENT SPIRITUALITY: PROFESSIONAL BOUNDARIES, COMPETENCY,

AND ETHICS

- 7-8 CULTURAL AND ECONOMIC FACTORS THAT (MIS)SHAPE ANTIBIOTIC USE:
- 7-10 THE RISE AND FALL OF THE FUTILITY MOVEMENT
- 7-19 ENVIRONMENTAL AND HERITIBLE FACTORS IN THE CAUSATION OF CANCER
- 7-24 PROFESSIONALISM: An Ideal To Be Sustained
- 8-1 A STUDY OF PATIENT CLUES AND PHYSICIAN RESPONSES IN PRIMARY CARE AND

SURGICAL SETTINGS.

- 9-11 END-OF-LIFE CONVERSATIO
- 10-18 RELIGION, SPIRITUALITY, AND MEDICINE: Application To Clinical Practice
- 11-5 THE ROLE OF COMPLEMENTARY AND ALTERNATIVE MEDICINE.
- 12-20 NARRATIVE AND THE PRACTICE OF MEDICINE
- 12-21 ERARITJARKTJAKA
- 12-22 PUTTING WOMEN IN CONTROL
- 12-23 FROM RITES OF PASSAGE TO LAST RIGHTS
- 12-24 FINALE FOR 2000

REFERENCE ARTICLES

- 2-8 ASSESSING THE RISK OF BREAST CANCER
- 2-18 CONGENITAL HEART DISEASE IN ADULTS
- 3-8 MEDICAL TERMINATION OF PREGNANCY
- 3-9 GUIDELINE FOR ANTICOAGULANT THERAPY TO PREVENT STROKE IN PATIENTS WITH ATRIAL FIBRILLATION
- 3-16 THERAPEUTIC MONOCLONAL ANTIBODIES
- 3-17 GUIDELINES ON PREVENTING CARDIOVASCULAR DISEASE IN CLINICAL PRACTICE.
- 3-18 ESTIMATING CARDIOVASCULAR RISK FOR PRIMARY PREVENTION
- 3-22 SCABIES AND PEDICULOSIS
- 3-23 NON-INVASIVE METHODS OF ARTERIAL AND VENOUS ASSESSMENT
- 3-24 NEUROLOGICAL COMPLICATIONS OF THE REACTIVATION OF VARICELLA-ZOSTER VIRUS
- 4-7 EVALUATION OF ABNORMAL LIVER-ENZYME RESULTS IN ASYMPTOMATIC PATIENTS.
- 4-18 RENAL ARTERY STENOSIIS
- 4-19 USE AND INTERPRETATION OF AMBULATORY BLOOD PRESSURE MONITORING
- 4-20 ULCERATIVE COLITIS
- 4-21 EVALUATION OF THE PATIENT WITH ACUTE CHEST PAIN
- 4-22 ARTERIAL ANEURYSMS
- 4-23 COOLING METHODS FOR HEATSTROKE VICTIMS
- 4-24 RED CELLS I: Inherited Anaemias
- 4-25 RED CELLS II: Acquired Anaemias and Polycythemia

- 5-23 A 52-YEAR-OLD SUICIDAL MAN
- 5-25 VASCULITIS
- 5-26 VARICOSE VEINS
- 6-4 MANAGEMENT OF ACUTE CORONARY SYNDROMES
- 6-16 THE IMPORTANCE OF DIAGNOSING POLYCYSTIC OVARY SYNDROME
- 6-22 HEALTH ADVICE AND IMMUNIZATIONS FOR TRAVELERS.
- 7-22 HYPERTENSIVE EMERGENCIES
- 7-23 DRUG THERAPY FOR BREAST-FEEDING WOMEN
- 7-25 NINE PRINCIPLES OF FAMILY MEDICINE
- 9-3 IMPROVING THE CARE OF PATIENTS WITH GENITAL HERPES
- 9-14 CURRENT ROLE OF PLATELET GLYCOPROTEIN IIB/IIIA INHIBITORS IN ACUTE

CORONARY SYNDROMES

9-15 THE ROLE OF THE INTERLEUKIN-1-RECEPTOR ANTAGONIST IN BLOCKING

INFLAMMATION MEDIATED BY INTERLEUKIN-1

- 9-18 DIAGNOSIS AND TREATMENT OF CHRONIC ABACTERIAL PROSTATITIS:
- 10-4 THE DIAGNOSTIC VALUE OF HISTORICAL FEATURES IN PRIMARY HEADACHE SYNDROMES 10-16 GRAVES' DISEASE
- 11-6 SEVEN LEGAL BARRIERS TO END-OF-LIFE CARE" Myths, Realities,

And Grains Of Truth

- 11-18 EXERCISE TESTING IN CLINICAL MEDICINE
- 11-19 TREATMENT POSSIBILITIES FOR UNSTABLE ANGINA
- 12-7 BAYSEAN STATISTICAL METHODS.
- 12-10 MANAGING DEPRESSION IN OUTPATIENTS
- 12-17 UNCOMPLICATED ACUTE BRONCHITIS
- 12-18 THE DIAGNOSIS AND TREATMENT OF COUGH
- 12-19 AGE RELATED MACULAR DEGENERATION

RENAL ARTERY STENOSIS

4-18 RENAL ARTERY STENOSIS

A review article – clinical features, diagnosis, and treatment. Atheromatous RAS is *not* commonly associated with mild or moderate hypertension. It is present in up to 1/3 of patients with malignant or drug-resistant hypertension. Nevertheless, the hypertension can be controlled in most patients with drug therapy. Angioplasty using stents has been an advance. Surgery should probably be reserved for patients in whom stenting fails. But, the quality of evidence makes treatment recommendations difficult.

RHEUMATOID ARTHRITIS

3-15 TUMOR NECROSIS FACTOR BLOCKERS IN RHEUMATOID ARTHRITIS

"For patients with rheumatoid arthritis, a new era of treatment has begun." Primary care clinicians stay alert for developments.

11-16 A COMPARISON OF ETANERCEPT AND METHOTREXATE IN PATIENTS WITH EARLY RHEUMATOID ARTHRITIS

"Etanercept (tumor necrosis factor inhibitor) represents an important new therapeutic option to decrease disease activity and slow joint damage in patients with active rheumatoid arthritis."

As compared with oral methotrexate alone, subcutaneous etanercept alone acted more rapidly to decrease symptoms and slow joint damage in patients with early active RA.

"Preventing the damage that occurs early in the course of the disease may be the key to better long-term functional outcomes."

11-17 INFLIXIMAB AND METHOTREXATE IN THE TREATMENT OF RHEUMATOID ARTHRITIS

In patients with persistently active RA despite methotrexate therapy, repeated doses of infliximab (an antibody against tumor necrosis factor) in combination with methotrexate provided clinical benefit and halted the progression of joint damage.

At present, primary care clinicians should inform patients with RA of the benefit/harm-cost of TNF inhibitors and refer those interested to a rheumatologist.

SCABIES

3-22 SCABIES AND PEDICULOSIS

A review. Permethrin and lindane are reasonable choices for local application.

SENSITIVITY

2-6 SENSITIVITY, SPECIFICITY, PREDICTIVE VALUES.

Editor's review of results of tests based on the preceding article: sensitivity, specificity, predictive value of a positive test, predictive value of a negative test. Calculations are simple and fun, but tricky.

SLEEP-DISORDERED BREATHING

12-11 LONGITUDINAL STUDY OF MODERATE WEIGHT CHANGE AND SLEEP-DISORDERED BREATHING

Even modest weight loss is likely to be effective in managing SDB and reducing new occurrence of SDB.

SMOKING

3-9 DECISION ANALYSIS AND GUIDELINE FOR ANTICOAGULANT THERAPY TO PREVENT STROKE IN PATIENTS WITH ATRIAL FIBRILLATION

Although the majority of patients with atrial fibrillation will benefit from anticoagulation to prevent embolic stroke, some patients will not benefit. This decision analysis is based on age, systolic BP, presence of cardiovascular disease, and left ventricular hypertrophy. It presents tables indicating clear benefit, or no benefit from anticoagulation in 12 categories of risk. Patient preference is basic to the decision to use anticoagulation.

3-11 CIGARETTE SMOKING AND INVASIVE PNEUMOCOCCAL DISEASE

3-12 SMOKING AND PNEUMOCOCCAL DISEASE

In immunocompetent individuals, smoking is a strong, independent risk factor for invasive pneumococcal disease. "It may be reasonable to incorporate pneumococcal vaccine into smoking cessation programs as well as to consider vaccinating those who continue to smoke." (Immuno-incompetent individuals [eg, HIV-infected] are also at high risk.)

4-2 EFFECT OF SMOKING CESSATION ON MORTALITY AFTER MYOCARDIAL INFARCTION.

Smoking cessation is the most productive intervention to improve prognosis after a MI.

8-13 SMOKING, SMOKING CESSATION AND LUNG CANCER IN THE UK SINCE 1950

Smokers who stop even well into middle age avoid most of their subsequent risk of lung cancer. Stopping before middle age avoids more than 90% of the risk attributable to tobacco.

Mortality throughout the first half of the 21st century could be substantially reduced by current smokers giving up the habit.

Young persons who begin to smoke now will henceforth become statistics in the middle and second half of the century. The good news — it's never too late to stop.

11-9 ASSOCIATION BETWEEN CIGARETTE SMOKING AND ANXIETY DISORDERS DURING ADOLESCENCE AND EARLY ADULTHOOD.

Heavy cigarette smoking during adolescence was associated with a higher risk of development of agoraphobia, generalized anxiety disorder, and panic disorder in early adulthood.

Primary care clinicians should recognize the youths who may be crying out for help.

11-10 SMOKING AND MENTAL ILLNESS: A Population-Based Prevalence Study

Persons with mental illness were about twice as likely to smoke as persons without mental illness. Primary care clinicians should consider smoking a possible marker for mental illness, especially in those who start at an early age.

SORE THROAT

1-8 PENICILLIN FOR ACUTE SORE THROAT: Randomised Double Blind Trial of Seven Days Versus Three Days Treatment or Placebo in Adults.

A seven day course of penicillin was effective in reducing duration of symptoms and reducing risk of suppurative complications. It is also effective in non-group A infections and reduced the risk of recurrent sore throat over the next 6 months.

A 3-day course was not any more effective than placebo in reducing total days of symptoms. *BMJ* January 15, 2000; 320: 150-154

1-9 SORE THROATS AND ANTIBIOTICS

"There is no single course of action that will suit all, or even most, patients." The evidence must be applied in different ways according to local conditions. These will include environmental factors (places in the world where acute rheumatic fever is common), history (previous middle ear infection), and social factors. "General practitioners put as much weight on social factors as on the physical examination in deciding whether or not to use antibiotics. Both patients and their doctors dance delicately around the complicated negotiation of antibiotics for upper respiratory infections, each aware of the other's sensibilities."

"At some point the benefits and harms resulting from treatments, . . . including emerging antibiotic resistance and costs to society, are so finely balanced that patients and their doctors must decide on a choice that is likely to be tipped one way by personal preference alone."

"To expect a one line answer from the evidence (a guideline, for example) is to ask too much." *BMJ* January 15,2000; 320: 130-31

12-6 DOES THIS PATIENT HAVE STREP THROAT?

No single element of the history or physical examination is powerful enough to confirm the probability of strep throat. Instead, physicians should consider a combination of findings including tonsillar exudate, tender or enlarged anterior cervical nodes, absence of cough, and a history of fever.

This clinical prediction rule can be useful and can help physicians make more informed use of rapid antigen tests and throat cultures.

SPECIFICITY

2-6 SENSITIVITY, SPECIFICITY, PREDICTIVE VALUES.

Editor's review of results of tests based on the preceding article: sensitivity, specificity, predictive value of a positive test, predictive value of a negative test. Calculations are simple and fun, but tricky.

SPIRITUALITY

6-21 PHYSICIAN AND PATIENT SPIRITUALITY: PROFESSIONAL BOUNDARIES, COMPETENCY, AND ETHICS

Spirituality pertains to the ultimate meaning and purpose of life. It has clinical relevance.

Clinical studies are beginning to clarify how spirituality and religion can contribute to the coping strategies of many patients with severe, chronic, and terminal conditions.

Should the physician discuss spiritual issues with his or her patients?

What are the boundaries between the physician and patient regarding these issues?

What are the professional boundaries between the physician and the chaplain?

10-18 RELIGION, SPIRITUALITY, AND MEDICINE: Application To Clinical Practice

Patients want to be seen and treated as whole persons, not as diseases. A whole person is someone whose being has physical, emotional, and spiritual dimensions. Ignoring any one of these aspects of humanity leaves the patient feeling incomplete, and may even interfere with healing. For many patients spirituality is an important part of wholeness.

The editorialist quotes 4 simple questions the ACP suggests be asked of those with terminal illness which acknowledges the spiritual life of the patient and might be appropriate and helpful.

STREPTOCOCCAL INFECTIONS

12-6 DOES THIS PATIENT HAVE STREP THROAT?

No single element of the history or physical examination is powerful enough to confirm the probability of strep throat. Instead, physicians should consider a combination of findings including tonsillar exudate, tender or enlarged anterior cervical nodes, absence of cough, and a history of fever.

This clinical prediction rule can be useful and can help physicians make more informed use of rapid antigen tests and throat cultures.

STROKE

2-10 CHOLESTEROL AND STROKES

Primary care clinicians have the responsibility and opportunity to reduce the incidence and progression of carotid atherosclerosis by lipid control, especially by use of statin drugs. As a result, incidence of embolic stroke can be reduced. BMJ February 19, 2000; 320: 459-

3-21 NEW GUIDELINES FOR STROKE PUBLISHED

Aspirin and stroke units are effective therapy, thrombolysis should be reserved for specialized centers.

4-4 LOW MOLECULAR WEIGHT HEPARIN VERSUS ASPIRIN IN PATIENTS WITH ACUTE ISCHEMIC STROKE AND ATRIAL FIBRILLATION

Another boost for regular use of aspirin immediately after AF-related embolic stroke and continued for 2 weeks. just as beneficial as heparin and more acceptable, easier to use, and much cheaper.

6-18 UPDATE ON ANTIPLATELET THERAPY FOR STROKE PREVENTION

The European Stroke Prevention Study evaluated antiplatelet drugs in *secondary* prevention in over 6500 patients. Aspirin alone reduced risk of second stroke by 18%; extended release dipyridamole alone by 16%; the combination by 37%

6-19 PHYSICAL ACTIVITY AND RISK OF STROKE IN WOMEN

Increasing physical activity levels were associated with substantial reductions in risk for total stroke and ischemic stroke in women. "We observed comparable magnitudes of risk reduction with similar energy expenditure from walking and vigorous activity."

6-11 THE CAUSES AND RISK OF STROKE IN PATIENTS WITH INTERNAL-CAROTID-ARTERY STENOSIS

The risk of stroke among patients with *asymptomatic* stenosis is relatively low. The benefit of endarterectomy should be calculated on the basis of prevention of large-artery strokes. About half of strokes in the territory of an *asymptomatic* stenosis in the internal carotid were not related to the stenosis.

Endarterectomy cannot prevent cardioembolic or lacunar strokes.

"The scales are tipped against the routine use of endarterectomy in patients who have no symptoms."

8-7 PRAVASTATIN THERAPY AND THE RISK OF STROKE

Therapy with the statin drug, pravastatin, was associated with a reduction in the rate of stroke as well as the rate of coronary disease in patients with established coronary disease. (Secondary prevention.)

7-2 EFFECT OF TREATING ISOLATED SYSTOLIC HYPERTENSION ON THE RISK OF DEVELOPING VARIOUS TYPES AND SUBTYPES OF STROKE: The Systolic Hypertension In The Elderly Program (SHEP)

Treatment induced a significant reduction in the incidence of all strokes in patients with isolated systolic hypertension.

Antihypertensive drug treatment which reached the goals of the study (<160 mm Hg) reduced the incidence of both hemorrhagic and ischemic (including lacunar) stroke.

9-8 WHOLE GRAIN CONSUMPTION AND RISK OF ISCHEMIC STROKE IN WOMEN.

Higher intake of whole grain foods was associated with a lower risk of ischemic stroke independent of known risk factors for CVD.

12-5 SHORT-TERM PROGNOSIS AFTER EMERGENCY DEPARTMENT DIAGNOSIS OF TIA.

Short-term risks of patients who presented to the ED with a TIA were substantial. Five factors stratified risk and would indicate immediate intervention — age greater than 60, diabetes, symptom duration longer than 10 minutes, weakness, and speech impairment

SUICIDE

5-23 A 52-YEAR-OLD SUICIDAL MAN

Reference article presents the Harvard Department of Psychiatry and National Depression Screening Day Scale.

Depression screening has been proven to be an effective way of identifying those with undiagnosed depressive illness and a useful tool for the primary care physician attempting to ascertain the likelihood and severity of depression and the presence of suicidal thoughts.

6-12 SUICIDAL BEHAVIOR IN GAY, LESBIAN, AND BISEXUAL YOUTH

Youths who feel that they are gay must either hide their feelings from others for many years or face the risks of "coming out". Either course is perilous. For some, one consequence of the confusion over their identity in a climate of intense intolerance and victimization may be suicidal behavior.

Epidemiologic studies in North America, and New Zealand show that gay and bisexual males are at least four times as likely to report a serious suicide attempt.

TERMINAL CARE

3-6 UNDERSTANDING ECONOMIC AND OTHER BURDENS OF TERMINAL ILLNESS: The Experience of Patients and Their Caregivers.

Primary care clinicians must be ever mindful of, and respond to, the emotional and financial stress patients, caregivers, and families undergo when facing a terminal illness. An empathetic physician can relieve some of the burdens.

3-7 DEATH AND THE RESEARCH IMPERATIVE

A prominent ethicist promotes the idea that, since death is a normal part of life, we should not compulsively use technology to maintain life when palliative care would be more appropriate. Death is not the principal evil of human life. We should not fight death to the end. Research should focus on premature death; should aim to shorten the period of poor health, pain, and impairment before death. Clinicians should help patients achieve a peaceful death. Preservation of life is not always a higher ideal than a peaceful death. Medical progress should be redefined as prevention of illness and disability — and a reduction in conditions that do not cause death, but ruin lives. It is not death that people seem to fear the most, but a life poorly lived.

5-9 IN SEARCH OF A GOOD DEATH

A focus group observational study describes 6 attributes of a good death. The culture of death has changed dramatically. Death is considered a natural part of life, not a failure of technology. Psychosocial and spiritual issues are as important as physiologic concerns. The quality of dying is related to acknowledgement of the lifetime context.

Helping persons to achieve a good death is a skill that is rarely natural — it must be learned.

7-1 OPIOID USE IN THE LAST WEEK OF LIFE AND IMPLICATIONS FOR END-OF-LIFE DECISION-MAKING

The Doctrine of Double-effect states that a harmful effect of treatment, even resulting in death, is permissible if it is not intended, and occurs as a side-effect of a beneficial action.

"Our findings indicate that appropriate dose of opioids for symptom control does not shorten life and there is little need to evoke DDE."

Studies of safety of opioids in cancer patients suggest that problems with respiratory depression are unlikely. Patients most at risk are those who receive increase over 2.5 times their usual dose. Increases above 2.5-fold occurred in only 5 patients in this series. The DDE may be a useful principle that can offer reassurance when facing difficult treatment decisions. It must be distinguished from euthanasia and its role should not be exaggerated. The doctrine of double effect need not be invoked to provide symptom control at the end of life.

9-11 END-OF-LIFE CONVERSATIONS

"We conclude that end-of-life conversations must become a routine, structured intervention in health care, and that advanced care planning is best viewed as one component in a series of ongoing end-of-life discussions."

11-6 SEVEN LEGAL BARRIERS TO END-OF-LIFE CARE" Myths, Realities, And Grains Of Truth

"Many legal barriers to end-of-life care are more mythical than real, but sometimes there is a grain of truth. Physicians must know the law of the state in which they practice."

See text for a discussion of 7 legal myths regarding end--of-life care.

Primary care clinicians must be equipped to give their terminal patients the best of palliative care.

THROMBOPHILIA

2-13 THE CHALLENGE OF THROMBOPHILIA IN MATERNAL-FETAL MEDICINE

There are many genetic mutations in clotting and anti-clotting factors which predispose individuals to venous thromboembolic disease. These are in addition to acquired risk factors (trauma and stasis). Primary care clinicians should consider these intrinsic risk factors in patients, especially those with recurrent disease. Prophylaxis may be indicated.

THYROID DISEASE

2-7 SUBCLINICAL HYPOTHYROIDISM IS AN INDEPENDENT RISK FACTOR FOR ATHEROSCLEROSIS AND MYOCARDIAL INFARCTION IN ELDERLY WOMEN: The Rotterdam Study

An important additional reason to screen women over age 50.

10-16 GRAVES' DISEASE

I enjoyed this review. I abstracted some points I felt needed emphasis, and some I did not know or had forgotten. RTJ

11-7 USEFULNESS OF ULTRASONOGRAPHY IN THE MANAGEMENT OF THYROID DISEASE.

Ultrasonography altered the clinical management of 2 out of every 3 patients referred because of detection of a thyroid nodule by physical examination. Clinical examination does not detect all nodules, many of which should have fine-needle aspiration.

Ultrasound should be routine in patients with thyroid nodules.

TRAVEL

6-22 HEALTH ADVICE AND IMMUNIZATIONS FOR TRAVELERS.

This reference comments on personal precautions and travel-related illnesses, and immunizations.

TOURNIQUETS

1-16 POTENTIAL RISK OF CROSS-INFECTION DURING PERIPHERAL-VENOUS ACCESS BY CONTAMINATION OF TOURNIQUETS

Many tourniquets were contaminated with blood. On culture, a high percentage grew out pathogenic bacteria. This presents a risk of transmission of bacterial as well as viral infections. "We recommend the use of disposable tourniquets."

TUBERCULOSIS

2-5 THE ROLE OF CLINICAL SUSPICION IN EVALUATING A NEW DIAGNOSTIC TEST FOR ACTIVE TUBERCULOSIS

A good example leading to calculations of sensitivity, specificity, predictive values, likelihood ratios, and pre- and posttest probabilities. Continued on the next abstract.

5-8 THE GLOBAL PROBLEM OF MULTI-DRUG RESISTANT TUBERCULOSIS.

Directly observed therapy short-course therapy (DOTS) even if well done, will not control MDRTB in countries in which substantial numbers of these organisms are now circulating. A poorly implemented DOTS rapidly generates more MDRTB cases. A new program has been proposed — the DOTS-Plus.

ULCERATIVE COLITIS

4-20 ULCERATIVE COLITIS

Review article. "Most patients can be managed wholly as outpatients." Oral 5-amino-salicylic acid will keep most relapses to a minimum. Most distal disease is amenable to topical 5-amino-salicylic acid and corticosteroid preparations.

UNSTABLE ANGINA

8-12 THE TIMI RISK SCORE FOR UNSTABLE ANGINA/NON-ST ELEVATION MI

In patients with UA/NSTEMI the TIMI risk score of 7 clinical variables is a simple prognostic scheme that categorizes a patient's risk of death and ischemic events. It provides a basis for therapeutic decision-making. The low-molecular-weight heparin enoxiparin was more beneficial than unfractionated heparin.

9-14 CURRENT ROLE OF PLATELET GLYCOPROTEIN IIB/IIIA INHIBITORS IN ACUTE CORONARY SYNDROMES

Intravenous GpIIb/IIIa inhibition therapy has greatly enriched the therapeutic armamentarium for patients with ACSs. Administered at the time of urgent angiography with PTCA, coronary revascularization, or empirically in the emergency department at presentation, these agents build on the antithrombotic template of aspirin and heparin. GpIIb/IIIa inhibition merits a prominent role in the management of ACSs, either medically or in conjunction with PTCA.

11-19 TREATMENT POSSIBILITIES FOR UNSTABLE ANGINA

An excellent reference treatment plan is outlined on page 1272.

Most of the interventions can be prescribed by primary care clinicians.

VACCINES

11-14 THE IMPORTANCE OF INJECTING VACCINES INTO MUSCLE

Injecting a vaccine into the layer of subcutaneous fat, where poor vascularity may result in slow mobilization and processing of the antigen, is a cause of vaccine failure. Needles should be long enough to reach muscle.

VARICELLA-ZOSTER VIRUS

3-24 NEUROLOGICAL COMPLICATIONS OF THE REACTIVATION OF VARICELLA-ZOSTER VIRUS

A review of unusual CNS complications. Aggressive therapy beginning as soon as possible after onset of herpes zoster may reduce severity of post-herpetic neuralgia. Treatment of established post-herpetic neuralgia is still unsatisfactory. Opiates are underused to help control pain.

VENOUS THROMBOEMBOLISM

4-4 LOW MOLECULAR WEIGHT HEPARIN VERSUS ASPIRIN IN PATIENTS WITH ACUTE ISCHEMIC STROKE AND ATRIAL FIBRILLATION

Another boost for regular use of aspirin immediately after AF-related embolic stroke and continued for 2 weeks. Just as beneficial as heparin and more acceptable, easier to use, and much cheaper.

4-5 PREVENTION OF PULMONARY EMBOLISM AND DEEP VEIN THROMBOSIS WITH LOW-DOSE ASPIRIN; The Pulmonary Embolism Prevention (PEP) Trial.

Another boost for use of aspirin post hip-surgery. "There is now good evidence for considering aspirin routinely in a wide range of surgical and medical patients at high risk of venous thromboembolism."

VENTRICULAR DYSFUNCTION

1-12 RISK ASSESSMENT OF LEFT VENTRICULAR SYSTOLIC DYSFUNCTION IN PRIMARY CARE: Cross Sectional Study Evaluating A Range of Diagnostic Tests

A normal electrocardiogram implies a low risk of left ventricular systolic dysfunction. An abnormal ECG combined with either a high atrial natriuretic peptide or a resting heart rate greater than diastolic BP, or both, identified patients with left ventricular systolic dysfunction.

2-12 PROTHROMBIN AND FACTOR V MUTATIONS IN WOMEN WITH A HISTORY OF THROMBOSIS DURING PREGNANCY AND THE PUERPERIUM

2-13 THE CHALLENGE OF THROMBOPHILIA IN MATERNAL-FETAL MEDICIN

There are many genetic mutations in clotting and anti-clotting factors which predispose individuals to venous thromboembolic disease. These are in addition to acquired risk factors (trauma and stasis). Primary care clinicians should consider these intrinsic risk factors in patients, especially those with recurrent disease. Prophylaxis may be indicated.

VIOLENCE

5-24 VIOLENCE IN PUBLIC HEALTH AND PREVENTIVE MEDICINE

This issue presents 9 articles on violence. "We can prevent violence if, and only if, we replace the moral and legal approach to it, which is based on moral condemnation, shaming, and punishment. This is a matter of vital importance to the future of humanity, in which the medical profession can serve as an invaluable role as educators and leaders."

VITAMIN B12

5-15 HELICOBACTER PYLORI — IS IT A NOVEL CAUSATIVE AGENT IN VITAMIN B12 DEFICIENCY?

H pylori may be a causative agent in adult B12 deficiency — possibly by causing food-cobalamin malabsorption. Eradication of the infection without B12 supplementation led to normal serum B12 levels and cure of the anemia.

5-16 LINKS BETWEEN HELICOBACTER PYLORI INFECTION, COBALAMIN DEFICIENCY, AND PERNICIOUS ANEMIA.

There are many causes of B12 deficiency, pernicious anemia and food-cobalamin malabsorption the 2 main causes. Primary care clinicians may keep in mind the possibility that H pylori may underlie B12 deficiency.

VITAMIN E

1-7 VITAMIN E SUPPLEMENTATION AND CARDIOVASCULAR EVENTS IN HIGH-RISK PATIENTS

Vitamin E, in this cohort of high-risk patients, had no apparent benefit on cardiovascular outcomes. It is very unlikely that vitamin E given for 5 years has any clinically worthwhile effect on cardiovascular disease

WARFARIN

11-8 TREATMENT OF WARFARIN-ASSOCIATED COAGULOPATHY WITH ORAL VITAMIN K

Low oral dose (1 mg) was more effective than placebo for rapidly lowering high INR values (5 to 10) in patients taking warfarin.

Primary care clinicians must always consider the cause of the increase in the INR.

WEIGHT GAIN

3-14 A PROSPECTIVE STUDY OF HOLIDAY WEIGHT GAIN

The weight gain during the holiday season averages about a pound. The problem is — we do not lose the pound during the rest of the year. Weight gradually increases over the years. If we do not wish to avoid holiday food and cheer, we should make a conscious effort to increase activity during the season.