UPDATE

Abstracts and news from the medical literature of interest to the primary-care physician

New Surgical Approach to Obesity

Two recent studies explored the Food and Drug Administration approved method of laparoscopic gastric banding for management of obese patients. In the procedure, a band is placed around the stomach to form a small proximal pouch; a catheter connects the band with a subcutaneous injection port, into which fluid is injected or aspirated to adjust the stomach diameter.

In one report, French surgeons described 500 severely obese patients who received the surgery. There were no perioperative deaths, and the most common early complication was gastric perforation. Late complications included band slippage and injection-port dysfunction, with 52 patients requiring reoperations. On average, patients lost about half of their excess weight in two years. Another European study describing 625 patients received similar results.

Zinzindohoue F, Chevallier JM, Douard R, et al: Laparoscopic gastric banding: A minimally invasive surgical treatment for morbid obesity. Prospective study of 500 consecutive patients. Ann Surg 2003 Jan; 237:1-9.

How Common Is Diastolic Dysfunction?

A new study suggests diastolic dysfunction is common in a general adult population and is often present in people not yet diagnosed with clinical congestive heart failure.

Researchers surveyed a random sample of 2,042 adults, age 45 years or older, to determine the prevalence of diastolic dysfunction. All subjects underwent Doppler echocardiography.

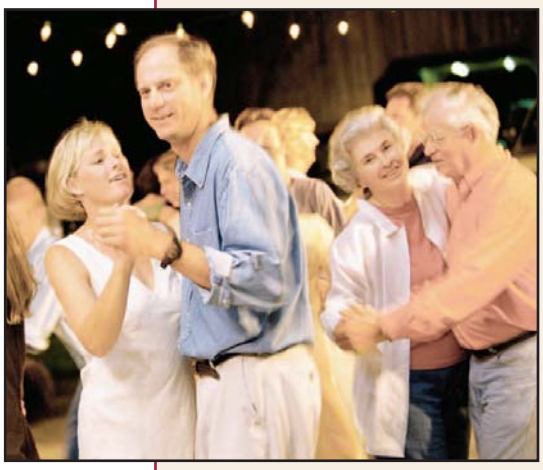
Twenty-one per cent of subjects had mild diastolic dysfunction, and 7% had moderate-to-severe diastolic dysfunction. Six of 13 people with severe diastolic dysfunction and six of 118 people with moderate diastolic dysfunction, had clinical histories of CHF. Only a quarter of people with moderate-to-severe diastolic dysfunction had reduced ejection fractions (≤ 50%).

During a median followup of 3.5 years, diastolic dysfunction was a powerful independent predictor of death, even after adjustment for ejection fraction.

Redfield MM, Jacobsen SJ, Burnett JC Jr, et al: Burden of systolic and diastolic ventricular dysfunction in the community: Appreciating the scope of the heart failure epidemic. JAMA 2003; 289:194-202.

Crohn's Disease: New Risk Factor

Although appendectomy for appendicitis is associated with low-risk for ulcerative colitis, new research suggests there is a high risk for Crohn's disease after appendectomy.



Researchers looked at 212,218 patients in Sweden who underwent appendectomies before they reached the age of 50 years, and found they had an increased risk for Crohn's disease, compared to the control group, for as long as 20 years afterward. The incidence rate ratios were highest for patients with perforated appendicitis, and lowest in patients whose original diagnosis was something other than nonspecific abdominal pain, or mesenteric lymphadentitis.

Patients who underwent appendectomies before the age of 10 years had a lower risk for Crohn's disease than those who had their appendectomy after the age of 10 years. In addition, Crohn's disease patients with histories of perforated appendicitis had the worst prognoses

Andersson RE, Olaison G, Tysk C, et al: Appendectomy is followed by increased risk of Crohn's disease. Gastroenterology 2003;

Diuretics Versus ACE Inhibitors For Treating Hypertension

Results from the recently published American Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial (ALLHAT) suggested that the diuretic chlorthalidone was at least as good as the angiotensin-converting enzyme (ACE) inhibitor lisinopril as first-line therapy for hypertension, but a new study yields a slightly different conclusion.

In the latest open-label, randomised trial, 6,083 hypertensive patients received either a diuretic or an ACE inhibitor as initial therapy. Hydrochlorothiazide and enalapril, respectively, were recommended but not mandatory and additional drugs were given when monotherapy was inadequate. The patients ranged in age from 65 to 84 years, were all white, and very few had diabetes or known coronary disease.

During the four years of followup, blood pressure reduction was identical in the two groups. The frequency of cardiovascular event or death from any cause in the ACE inhibitor group was 56 per 1000 patient-years, and 60 per 1000 patient-years in the diuretic group, a barely significant difference. The ACE inhibitor group had a significantly lower rate of myocardial infarction, but not of stroke or overall mortality.

Wing LM, Reid CM, Ryan P, et al: A comparison of outcomes with angiotensin-convertingenzyme inhibitors and diuretics for hypertension in the elderly. N Engl J Med 2003; 348:583-92.

How Accurate Is the Clinical Diagnosis of Dementia?

A recent study tracted 101 elderly individuals in a long-term care unit to determine the accuracy of clinical criteria for Alzheimer's disease (AD), vascular dementia (VaD), and mixed dementia (AD plus stroke-related dementia), compared with definitive postmortem neuropathologic diagnoses.

Clinically, dementia was diagnosed based on Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM-III) criteria, AD was diagnosed using the National Institute of Neurological and Communicative Disorders and Stroke and the Alzheimer's Disease and Related Disorders Association (NINCDS-ADRDA) guidelines, and VaD was diagnosed using the criteria of the Hachinski Ischemic Score (HIS), the State of California Alzheimer's Disease diagnostic and Treatment Centers (ADDTC), Loeb and Gandolfo, or the The National Institute of Neurological Disorders and Stroke-Association Internationale pour la Recherche et l'Enseignement en Neurosciences (NINDS-ARIENS). Neuropathologically, AD was diagnosed in the absence of vascular lesions, VaD was diagnosed if their were infarcts but no significant microscopic neurodegenerative lesions, and MIX was diagnosed if both AD and VaD were present.

None of the clinical scales were very sensitive or specific for MIX, but when MIX was excluded, clinical-pathologic agreement was nearly perfect, HIS was the most sensitive clinical measure, and NINDS-ARIENS was the most specific. Across all cases, the order for agreement (greatest to least) was NINDS-ARIENS, ADDTC, Loeb, HIS.

Zekry D, Duyckaerts C, Belmin J, et al: Alzheimer's disease and brain infarcts in the elderly: Agreement with neuropathology. J Neurol 2002; 249:1529-34.

Treating Nevi with Lasers: Safe and Effective?

The use of lasers to treat melanocytic nevi had been subject to debate because of concerns about malignant transformation, but in the last few years it has become relatively clear that such treatment is unlikely to increase malignant potential. A recent trial which treated several hundred nevi in 12 patients evaluated the efficacy of this treatment.

The patients all had skin types I, II, or III, and all nevi were smaller than 7 mm in diameter. Each lesion was treated initially with the Q-switched ruby laser. If necessary, the lesions were retreated at one month intervals with a Q-switched or normal mode ruby laser, up to two times.

All junctional lesions responded completely. In lesions with junctional and dermal components, the flat area cleared completely, but the raised areas responded only partially. In lesions that cleared, there was no recurrence, even one year later. The treatment was well tolerated, crusting was not uncommon but temporary, and the only important adverse effect was temporary hypopigmentation in two patients.

Westerhof W and Gamei M: Treatment of acquired junctional melanocytic nevi by Q-switched and normal mode ruby laser. Br J Dermatol 2003; 148:80-5.

Laparoscopic Fundoplication for GERD: An Unmet Promise?

A recent report evaluated the efficacy and outcomes of laparoscopic fundoplication to treat gastroesophageal reflux disease (GERD) in routine clinical practice.

Researchers surveyed 80 patients who had undergone the treatment in a managed-care organisation, and collected data on demographics, symptoms, and medication use using validated instruments. Sixty-one per cent of patients were completely satisfied with the procedure's outcome, 24% were somewhat satisfied, 9% were dissatisfied, and 6% were very dissatisfied. Heartburn was reported by 33% of patients, and regular weekly medication use for heartburn was reported by 32%.

Sixty-seven per cent of patients reported new symptoms, including excessive gas (47%), bloating (26%), and dysphagia (27%). Intent-to-treat analysis indicated that 18% would have required antisecretory medications, and 38% would have experienced new symptoms. Of the treated patients, 11% required esophageal dilation for symptomatic dysphagia, and 7% required repeat surgery.

Vakil N, Shaw M, Kirby R: Clinical effectiveness of laparoscopic fundoplication in a U.S. community. Am J Med 2003; 114:1-5.

Lyme Disease Without the Rash

An initial symptom of classic Lyme disease is erythema migrans, which may be accompanied by nonspecific symptoms. Researchers in an original 20-month Lyme disease vaccine trial described patients who presented systemic symptoms without erythema migrans.

The study examined seroconversion to *Borrelia burgdorferi* in 10, 936 people from 10 endemic states in the U.S. Prospective testing identified 24 patients with serologic evidence of acute Lyme disease but no erythema migrans. Arthralgias, fever, and malaise were the most common symptoms, along with severe occipital headaches, often with neck stiffness. None of the 24 patients had gastrointestinal or respiratory symptoms. Four patients also had serologic evidence of Ehrlichia or Babesia infection; these patients had more severe flu-like symptoms with chills. Patients responded to antibiotic treatment with doxycycline or amoxicillin within a median of three to seven days. No Lyme disease patients without erythema migrans developed late joint or neurologic manifestations. Another 14 study participants who had serologic evidence that was suggestive of Lyme disease but no rash had similar systemic flu-like symptoms.

Steere AC, Dhar A, Hernandez J, et al: Systemic symptoms without erythema migrans as the presenting picture of early Lyme disease. Am J Med 2003; 114: 58-62.

Sigal LH: Toward a more complete appreciation of the clinical spectrum of Borrelia burgdorferi infection: Early Lyme disease without erythema migrans. Am J Med 2003; 114: 74-5.