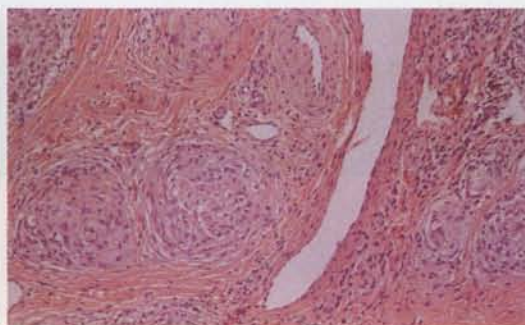


# ARCHIVES

OF

# FAMILY MEDICINE

MARCH/APRIL 1997



See Special Selection, page 99.

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TRIAL OF LABOR OR REPEATED  
CESAREAN SECTION

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COMPLIANCE WITH INFLUENZA  
VACCINATION

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EFFECTIVENESS OF A NURSE-BASED  
INTERVENTION IN A COMMUNITY  
PRACTICE ON PATIENTS' DIETARY  
FAT INTAKE AND TOTAL SERUM  
CHOLESTEROL LEVEL

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SMOKING SCREENING AND MANAGEMENT  
IN PRIMARY CARE PRACTICES

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CLINICAL PRACTICE GUIDELINES  
IN COMPLEMENTARY AND  
ALTERNATIVE MEDICINE

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ANTIMICROBIAL MANAGEMENT  
OF *HELICOBACTER PYLORI*-ASSOCIATED  
GASTROINTESTINAL TRACT DISEASE

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CHARLES KING MERVINE III MD 0384 \*  
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## Personal Statement

**M**IDWAY UP the Israeli coast, a few kilometers inland, a precipice of kurkar limestone climbs nearly 100 meters to form the foot of Mount Carmel. A cave perched high on its face opens outward to where the sea once was, spilling some deposits from 500 000 years of human and protohuman activity there. In 1992, Israeli archaeologists reopened excavations at this site in an effort to clarify its most controversial find: the jaw of a morphologically modern human buried almost 100 000 years ago, some 40 000 years before Neanderthals had last occupied that cave and 55 000 years before any equivalent find in Europe. While working there as a consultant that summer, I was shown the thickened skull of a Cro-Magnon man, *Homo sapiens*, who had died with Paget's disease. For all the spirited debate on the emergence of humanity, my mind was gripped with questions about this one man's life and death.

His age in millennia was greater than mine in years, but I wondered

if we hadn't shared a number of very human experiences. Did he know the spin of confusion surrounding an uncertain enterprise, as I surely did when I left my career in architecture and archaeology and began one in medicine? Was his heart ever filled with dread as a brother left for battle, as mine was yet overfilled when my little brother was called to the Persian Gulf at Thanksgiving in 1990? Did he weep openly at his brother's return, as I had 6 months later? Had he ever felt the visceral acrobatics of falling in love, as I did for the woman who is now my wife? Did his family endure a protracted feeling of helplessness while watching his disease progress, as mine has since my mother was diagnosed with metastatic breast cancer late in 1991?

Although the differences between this man and myself must be considerable, I find the parity more striking: The two of us have likely had the same emotions arise from the depths of our unique identities. Commensurable experiences weave us both into a single, vast human fabric that spans the ages as it does the continents. When I changed my ca-

reer to medicine, I was choosing to participate fully in those experiences, rather than scrape at their residue with my archaeologist's trowel.

I am the oldest son in a family of 12 children, and my wife and I are planning a family of our own. But my family truly extends to a Cro-Magnon with Paget's, and it includes the billions of humans between and beyond. It is more than the fact that we all share a morphologically modern jaw. We are equally defined by our internal life and, moreover, by our capacity to recognize its presence in one another. I place a priceless value on family and on that branch of medicine named for it. Family medicine does more than recognize the connections within us and between us; it celebrates them.

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### Clinical Pearl

Vitamin E supplements were associated with a lower rate of heart disease in male physicians, with a relative risk of 0.64. (*N Engl J Med.* 1993;328:1450-1456.)

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### Clinical Pearl

After comparing metered-dose inhalers with spacers with nebulizer treatment for children with acute asthma over the age of 2 years in an emergency department, there was no difference in outcomes (oxygen saturation, number of treatments, need for steroids, hospitalization rate, peak flows, or rating of severity), but the nebulizer group was in the emergency department longer, had more vomiting, and had higher heart rates. Thus, the metered-dose inhaler with spacer looks like it should be the preferred treatment for those with mild to moderate asthma. (*Arch Pediatr Adolesc Med*. 1995;149:201-205.)

## CONCLUSIONS

As a result of these study findings, we initiated the following modifications in our practice: (1) Dietary fat intake assessment has been established as a routine for patients with hyperlipidemia. Section I EPAT testing is being performed during a physician visit and during a nurse counseling visit. This strategy provides patients and physicians with an objective indication of the patient's need for dietary counseling without requiring an additional office visit. Patients shown by the EPAT score to have poor eating habits may be more willing to receive dietary counseling. (2) An office system promoting cholesterol screening for all adults has been initiated. National Cholesterol Education Program guidelines recommend lipid screening for all adults. Hahn<sup>18</sup> demonstrated that it is feasible to conduct lipid screening as a routine during all visits in a community-based family practice. It is possible that the additional patients with hyperlipidemia who are identified by a screening protocol may be following a less healthy diet and, thus, have a greater need for dietary counseling. Further study is needed to determine the effectiveness of these modifications, as well as other clinic-based efforts to improve patients' cholesterol levels.

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We thank Phillip Kofron, MD, for his assistance with designing and initiating the study and Susan Adlis, MS, for statistical analysis.

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## Clinical Pearl

Tidal irrigation (with 1 L saline and bupivacaine hydrochloride placement) for osteoarthritis of the knee was better than conservative medical management at 14 weeks for 57 randomized patients. (*J Rheumatol*. 1992;19:772-779.)

need to assume the burden of educating our patients in our offices about low-fat diets. That is grounds for celebration.

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#### Clinical Pearl

Magnetic resonance imaging is better than computed tomography for multiple sclerosis. However, compared with neurologist's diagnosis at 6 months of follow-up, magnetic resonance imaging was negative in 25% of those determined to have multiple sclerosis and equivocal in another 40%. The sensitivity was found to be 58%. (*JAMA*. 1993;269:3146-3151.)

A second important implication from this survey is that physicians need to understand why patients use alternative therapies. The present survey results show that patients desire "control" over treatment planning. Patients want physicians to listen, be flexible, and allow patients to be active participants in the therapeutic encounter. With some involvement in treatment planning, anxiety may decrease and indifference by the patient might be reduced. This type of therapeutic interaction might decrease the number of patients who do not tell their physician they are using alternative therapies. Second, that patients need to believe these therapies work is predictable and understandable. Many of these approaches may also activate endogenous physiological mechanisms that produce healing. The "placebo" effect may play an important role. The patient's belief system and the larger overarching role of the mind and brain probably is involved in the healing response.<sup>6</sup>

An equally important dimension that was not evaluated in the present survey is the role of attitude and belief of the family physician in the use of these alternative therapies. It has been reported<sup>7</sup> that more than 50% of physicians not only considered many alternative therapies legitimate, but also referred patients for these therapies. Many of these conventional physicians expressed an interest in training and considered that evidentiary rules applied to conventional medicine also should apply to alternative medicine.<sup>7</sup> This finding is important, because it suggests that physicians are becoming more knowledgeable and interested in the use of these alternative therapies. Trust between patients and physician in discussing these areas may be an important outgrowth of this effort.

Future surveys will need to track patients' use of alternative practices for a longer time so that a more complete description of any trend in usage and any residual effect of the treatment efficacy might be reported. Questions should include evaluating timing and sequencing of alternative therapies with or without conventional treatments. A more precise definition of "herbal remedies" or "behavioral techniques" is needed. A better profile of who uses alternative therapy, such as with children, would fill in missing gaps, and the attitudes of respondents toward inclusion of third-party payers would be helpful.

As the practice of conventional medicine moves into the 21st century, issues of managed care, cost-benefit offsets, and the role of patient-physician dialogue in the use of many of these alternative therapies will be debated. As some therapies are proved to be efficacious, their integration with and into conventional medicine may be a way of augmenting and optimizing health care. In a recently held consensus conference sponsored by our office, behavioral and relaxation techniques were found and recommended to be beneficial for the treatment of pain or insomnia.<sup>8</sup>

Previously held assumptions that alternative medicine is nothing but snake oil and quackery are too simplistic. It is important to determine whether certain adjunctive, alternative medical therapies may be useful, safe, and cost-effective for the patients who use them.

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## Announcement

### Free Patient Record Forms Available

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lori eradication in patients with PUD, especially in those populations poorly studied to date (pediatric patients, patients with GU, and those with complicated DU or GU). Other areas in need of research include the initial examination of the patient with dyspepsia (questions emerge regarding the need to test for *H pylori*, to treat empirically if the patient is *H pylori*-positive, and to perform endoscopy at initial examination to evaluate PUD vs NUD vs gastritis), the value of testing for eradication, and the role of *H pylori* eradication in the prevention of gastric cancer. Further studies are needed in the areas of antimicrobial resistance and potential for inappropriate antimicrobial use. Preliminary data from Denmark suggest that the latter may already be a problem.<sup>322</sup> Drug therapy issues, such as formulation, timing of administration with regard to meals, frequency of administration, dosage, type of bismuth preparation, duration of therapy, and cotherapies to raise gastric pH, still require refinement.<sup>305,318,323,324</sup>

In this era of cost containment, cost-effectiveness studies of *H pylori* treatment compared with traditional treatment approaches are required.\* These studies should assess costs associated with mortality, treatment, practitioner visits, endoscopy and other diagnostic tests, hospitalization, surgery, lost time from

work, travel, compliance, and pain and suffering. Preliminary studies have shown the potential for improved clinical outcomes with economic savings in the short term for patients receiving maintenance H<sub>2</sub>RA therapy if *H pylori* were eradicated (savings were secondary to decreased costs from complications, practitioner visits, diagnostic tests, and therapy itself) as well as in the long term for those not receiving maintenance H<sub>2</sub>RA therapy.<sup>325-327</sup> Another preliminary study used a decision analysis model of clinical and economic outcomes for *H pylori*-positive DU over a 2-year period for H<sub>2</sub>RA (acute followed by maintenance treatment), quadruple therapy (bismuth plus metronidazole plus tetracycline plus H<sub>2</sub>RA), omeprazole plus amoxicillin, and omeprazole plus clarithromycin. Overall 2-year costs were \$1654, \$643, \$820, and \$661, respectively. Quadruple therapy costs were sensitive to the compliance rate in that at least 60% of patients had to take at least 60% of the regimen for this to be the least expensive regimen. If the *H pylori* eradication rate for the omeprazole plus clarithromycin regimen rose above 80%, this regimen became the least expensive.<sup>328</sup> Another study that used a decision model compared the costs of 4 approaches to the management of duodenal ulcer (maintenance H<sub>2</sub>RA, intermittent H<sub>2</sub>RA,

vagotomy, and antibiotic therapy with omeprazole plus amoxicillin or bismuth plus metronidazole plus tetracycline). The model predicted that after antibiotic therapy, maintenance H<sub>2</sub>RA therapy, vagotomy, intermittent H<sub>2</sub>RA therapy, and no therapy, the percentages of patient time spent free of DU would be 99.7%, 96.6%, 94.4%, 89.4%, and 82.8%, respectively. After 15 years, the expected per-patient total costs of treatment would be \$995, \$11 186, \$17 661, and \$10 350 after antibiotic therapy, maintenance H<sub>2</sub>RA therapy, vagotomy, and intermittent H<sub>2</sub>RA therapy, respectively. Incorporating endoscopy to verify *H pylori* eradication raised the costs of antibiotic therapy to \$2426. Even with increasing the annual *H pylori* infection rate and decreasing *H pylori* eradication rates, antibiotic therapy would still be the least expensive therapy for DU and provide the least time spent with an active DU.<sup>329</sup>

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The list of references cited in this article may be obtained from Dr Guay on request.

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#### Clinical Pearl

Angiotensin-converting enzyme inhibitors can cause hypoglycemia. This can be good, eg, improved control in diabetes mellitus, or bad, causing symptomatic hypoglycemia. (*Lancet*. 1995;345:1195-1198.)

cholecystectomies.<sup>3,4</sup> These stones are difficult to retrieve, and it is generally felt that they are of minimal consequence.<sup>3,5,6</sup> However, there have been a number of case reports in the surgical literature describing unique complications related to "dropped" stones. These include intra-abdominal abscess,<sup>6</sup> subcutaneous abscess,<sup>4</sup> small-bowel obstruction,<sup>7</sup> and cholelithoptysis.<sup>8</sup> These complications can be associated with significant morbidity, including fever, weight loss, and hospitalization, and can require further surgical intervention.

The natural history of stones that are left in the abdominal cavity has not been well defined. Pigmented stones can harbor bacterial microcolonies and can act as a nidus of infection when left in the abdominal cavity.<sup>9</sup> This may explain the development of a delayed abdominal abscess. Stones can also trigger a severe local inflammatory response and then migrate through layers of intra-abdominal structures. For example, a stone can migrate through the abdominal wall to create a subcutaneous abscess<sup>4</sup> or through the urinary bladder and be discharged in the urine.<sup>10</sup> A stone can also erode through the diaphragm and into a bronchus and lead to cholelithoptysis.<sup>8</sup> The vague symptoms reported by our patient over several months may be explained by the slow migration of a stone through layers of the abdominal wall.

There is discussion in the literature about increased efforts to prevent spillage of stones and more vigorous attempts to retrieve stones during laparoscopic cholecystectomies.<sup>5,6</sup> However, until these techniques can be perfected, family physicians need to be

aware of potential late complications of routine laparoscopic cholecystectomy.

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We thank George P. Valko, MD, for his assistance in the evaluation and care of this patient.

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## Clinical Pearl

In patients with acute optic neuritis, high doses of intravenous methylprednisolone followed by oral prednisone had little effect on visual recovery but decreased the rate of development of multiple sclerosis over the next 2 years. (*N Engl J Med.* 1993;319:1764-1769.)