Federal update

From the AHRQ

AHRQ publishes study of modalities to prevent thromboembolism

Results of a study by the Agency for Healthcare Research and Quality indicate that there is insufficient evidence to establish whether modes of therapy used to prevent thromboembolism in trauma patients are better than one another or better than no therapy. Modes of therapy included in the study were sequential compression devices, low-dose heparin, low-molecular-weight heparin, vena caval filters, and combinations of these, all of which have associated contraindications and morbidity.

Researchers evaluated existing data to produce tailored answers for each of four questions regarding the best methods of prevention and screening of venous thromboembolism after an injury, which groups of trauma patients are at high risk for having venous thromboembolism, and the role of vena caval filters in preventing pulmonary embolism after injury.

As results neither disproved nor proved benefit from prophylaxis, researchers suggest that future research identify trauma patients in need of venous thromboembolism prevention as well as evaluate the safety and efficacy of modes of prophylaxis.

Copies of the report are available by calling 800-358-9295.

From the FDA

FDA approves oseltamivir phosphate for prevention of influenza

The Food and Drug Administration approved oseltamivir phosphate (Tamiflu) for prevention of influenza. The drug was

approved for treatment of patients with influenza in 1999.

For treatment of influenza, 75 mg is administered twice daily for 5 days. For prevention of influenza, 75 mg of oseltamivir phosphate is administered once daily for 7 days for postexposure and 42 days for seasonal prevention.

Although the drug is not a replacement for the flu vaccine, Hoffman-La Roche and Gilead Sciences, the drug's developer, suggests that oseltamivir may provide a protection option when the flu vaccine is unavailable.

Tacrolimus ointment for eczema recommended for FDA approval

The Food and Drug Administration found tacrolimus (Protopic) ointment to be effective for treatment of patients who have moderate to severe eczema, offering a steroid- free treatment option.

Twenty-eight international studies have been conducted for tacrolimus ointment, including a 12-week double-blind American study in which patients who had eczema were randomly assigned to one of three groups that applied a 0.03% or 0.1% concentration of the ointment or placebo twice daily. Patients were evaluated at 3-week intervals up to 12 weeks and at 2 weeks posttreatment. Both concentrations of the ointment improved or completely cleared symptoms of the disease in two thirds of the patients.

Most patients with eczema are diagnosed in early childhood, with nearly half outgrowing the disease. Since 1970, the number of people with eczema has tripled, and irritants that stimulate the immune system are believed to be the cause.

FDA approves arsenic trioxide

The Food and Drug Administration has approved arsenic trioxide (Trisenox) for patients with acute promyelocytic leukemia

who are refractory or have relapsed from chemotherapy.

A study involved 40 patients between 6 and 72 years of age with refractory or relapsed acute promyelocytic leukemia who had been treated with transretinoic acidand anthracycline-based chemotherapy. Patients received 0.15 mg/d of arsenic until leukemia cells were cleared from bone marrow. Of 40 patients, 70% had complete remission after an average of 51 days.

Adverse events included acute promyelocytic leukemia differentiation syndrome, increases of the Q-T interval in electrocardiogram, increases in white blood cell count, abdominal discomfort, headache, fatigue, fluid accumulation, and skin changes.

The report can be found in the November 1 issue of the *Journal of the American Medical Association*.

FDA analyses of reports of serious complications lead to withdrawal of alosetron hydrochloride from market

After receiving 70 reports of serious adverse events in patients taking alosetron hydrochoride (Lotronex), the Food and Drug Administration and representatives from the drug's manufacturer, Glaxco Wellcome, convened a meeting that led to the manufacturer's voluntary withdrawal of the drug from the market. Reports included 49 patients who had ischemic colitis and 21 who had severe constipation. Of the 70 cases, 34 resulted in hospitalization without surgery, 10 required surgery, and 3 patients died. Alosetron is approved to treat irritable bowel syndrome in women.

The FDA upgraded labeling for alosetron in June after receiving seven reports of serious complications of constipation. Alosetron is the third prescription drug to be withdrawn from the market this year because of safety concerns.

FDA investigating reactions to Lyme disease vaccine

The Food and Drug Administration received reports—primarily from the northeastern United States—of patients who have severe arthritis and Lyme disease after receiving the vaccination against Lyme disease. Physicians in areas where Lyme disease is common say they have treated patients with arthritis and Lyme disease that they attribute to the vaccine.

SmithKline Beecham Biologicals, the vaccine's developer, tested the vaccine on 10,000 people over a 2-year period, with no more side effects reported than those who were not vaccinated. Although the drug agency's vaccine advisory committee then endorsed the drug, several members expressed concern that taking the vaccine could result in arthritis and possibly Lyme disease.

Although the FDA previously investigated reactions following vaccination only if they were life-threatening, persistent, or long-term, the agency will now investigate all cases of arthritis and Lyme disease that follow vaccination.

The vaccination was approved by the FDA 2 years ago, and 440,000 Americans have received it.

From the NIH

Study tracks terminally ill patients' priorities

Scientists at the National Institutes of Health tracked terminally ill patients over 6 months. Of 988 patients, 60% believed euthanasia or physician-assisted suicide should be available as an option, although only 10.6% would consider the option for themselves.

The study also indicated priorities dying patients may list, such as preparing for death, spending time with and not being a burden to loved ones, and remaining mentally competent. Results indicate that the ability to honor these priorities becomes problematic when physicians fail to discuss impending death with patients. With children, the study found, parents realized death was imminent approximately 100 days before the event, while physicians

knew the prognosis 100 days before that.

End-of-life care is a growing concern because so few dying patients write advance directives and, consequently, wishes regarding resuscitation are unknown.

NIH panel presents treatment recommendations for women with breast cancer

A consensus panel convened by the National Institutes of Health made recommendations about adjuvant modes of therapy for women with breast cancer to clarify decision-making about treatment options. Researchers note that decisions about the choice of adjuvant therapy should be based on patient age, tumor size, and presence or absence of hormone receptors or cancerous lymph nodes.

Specific recommendations include the following:

- ☐ Hormonal therapy for women whose tumors contain estrogen receptors regardless of age, menopausal status, tumor size, or cancer spread.
- ☐ Chemotherapy with a combination of drugs for most pre- and postmenopausal women regardless of lymph node involvement or estrogen receptor status.
- ☐ Postsurgical radiation for women who have undergone mastectomy and have four or more cancerous lymph nodes or an advanced primary tumor.

As adjuvant treatments involve serious short- and long-term side effects, the panel recommends that trials include quality-of-life measures and long-term follow-up.

The recommendations were presented at the NIH Consensus Development Conference on Adjuvant Therapy for Breast Cancer on November 1. The full statement may be obtained by calling 888-644-2667.

NCI study results indicate that test helps to prevent colon cancer

Colon cancer rates for people who used the fecal occult-blood screening test over 18 years were reduced by 20% compared with those who did not use the test, indicate results of a study funded by the National Cancer Institute, National Institutes of Health.

The Minnesota Colon Cancer Control Study involved 46,551 people between the ages of 50 and 80 years randomly assigned

to one of three groups who received annual screening, biennial fecal occult-blood screening, or control. Participants were followed up over 18 years for new cases of colorectal cancer and deaths.

Of 46,551 people, 417 patients in the annual-screening group and 435 patients in the biennial-screening group had new cases of colorectal cancer compared with 507 patients in the control group—a 20% reduction in the cancer rate of patients who periodically underwent the annual or biennial testing.

The report can be found in the November 30 issue of the *New England Journal of Medicine*.

NIAID study results indicate variation in immune system gene affects risk of HIV infection

A variation in an immune system gene called RANTES may increase a patient's susceptibility to HIV infection and may work also to slow progression from HIV infection to acquired immunodeficiency syndrome, report scientists from the National Institute of Allergy and Infectious Diseases, National Institutes of Health.

Researchers looked at RANTES gene variations in HIV-positive and HIV-resistant individuals who participated in the Multicenter AIDS Cohort Study, which involved the largest group of HIV-infected and at-risk people in the world. Genetic differences—called single nucleotide polymorphisms (SNPs)—appear to be related to an increased risk and, paradoxically, to a 40% longer progression to AIDS for patients infected with HIV.

Scientists speculate that SNPs cause the inflammation that allows infective agents into the body, but SNPs also block HIV from entering T cells, the usual course for spreading the disease.

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From the CDC

Reductions of tobacco and alcohol use among pregnant and reproductive-aged women have stagnated

Although women of childbearing age achieved overall reductions in alcohol and tobacco use in the 1980s, the rate remained unchanged at 4% in the 1990s, indicate 10 years of data collected by the Centers for Disease Control and Prevention. In 1997, 74% of 18- to 20-year-old pregnant women stopped using alcohol and tobacco compared with 83% of older pregnant women. Further, pregnant women who used both substances were more likely to stop using alcohol (74%) than tobacco (52%).

Researchers note that alcohol and tobacco use not only threaten a woman's health but can also prevent pregnancy and, if she is pregnant, harm her child. Adverse effects of alcohol and tobacco use for women include fertility, preterm birth, spontaneous abortion, and cancer. Use of these substances while pregnant may result in the child having fetal alcohol syndrome, birth defects, growth deficits, developmental disabilities, and learning disorders.

Among 18- to 20-year-old women who were not pregnant, use of both substances increased from 13.5% to 13.7% over the same period.

The findings were reported in the November issue of *Obstetrics and Gynecology*. ◆