## Isotopes & Radiation

## CARDIOLOGY

## Imaging agent can spare patients from surgery

MAGING PATIENTS USING a certain technetium-99–based agent can reliably identify the presence or absence of heart disease and prevent some patients from undergoing unnecessary cardiac catheterization, according to new research presented on March 20 at the 50th Annual Scientific Session of the American College of Cardiology in Orlando, Fla. The study was conducted using the Tc-99m sestamibi–based Cardiolite, an FDA-approved heart imaging agent used to evaluate the heart's pumping ability and gauge the amount of blood flow to the heart. (See *NN*, May 2000, p. 54.)

"By utilizing nuclear cardiology testing in advance of more aggressive diagnostic tests, we can both avoid exposing patients to unnec"Our findings demonstrate that clinicians can utilize the Cardiolite test to help determine the next steps in patient care."

essary surgical risks and medical expenses," said Howard Lewin, M.D., principal investigator of the study and assistant professor of medicine at the University of California, Los Angeles. "This study shows that Cardiolite may spare some patients from these risks and the discomfort of cardiac catheterization by identifying situations when it is not needed."

This retrospective analysis evaluated 9975 patients with no previous history of heart dis-

## **Isotopes & Radiation Briefs**

A NEW CONSUMER BROCHURE ON FOOD IRRADIATION has been published by the National Consumers League, the nation's oldest consumer organization. Food Irradiation . . . What You Need to Know is available for download on the Web at <www. nclnet.org/foodsafety/irradiationbroch.html>. A hard copy can be ordered by sending \$1 for postage and handling to NCL, 1701 K St., N.W., Suite 1200, Washington, D.C. 20006.

**UNLABELED IRRADIATED FOOD HAS BEEN FOUND ON THE SHELVES** of British supermarkets and health food stores, according to an investigation by the BBC announced in March. Four of 28 samples purchased at random in England and Scotland were found to contain evidence of irradiation. The treatment is allowed on herbs and spices in the United Kingdom, but only if the products are clearly marked. Vegetarian burger mix, curry powder, a spice blend, and a cheese seasoning all showed positive results when analyzed. The food samples were screened to measure the amount of light emitted when exposed to infrared radiation. BBC investigators also found evidence of irradiation on Ginseng capsules whose bottle was labeled "non-irradiated."

The companies in violation have received a letter of warning from government officials, but none have yet been prosecuted. The findings are not the first time unlabeled irradiated food has been found. Seven of 18 samples of shellfish analyzed in the past five years were found to contain evidence that they were irradiated.

**FDA IS STUDYING THE IRRADIATION DISCLOSURE STATEMENT** to determine whether the current labeling requirements are an obstacle to consumer acceptance. Currently, retail packages or displays must include both the radura logo and a statement that the product was either "treated with radiation" or "treated by irradiation." The two-month study, set to conclude at the end of this month, consists of six focus groups in three different regions of the country.

AN ADVANCE IN THE LINKING OF I-131 TO ANTIBODIES was described at the annual meeting of the American Association for Cancer Research on March 26. Degradation of iodine-131 from the antibody after it is bound can be reduced by using a new peptide-based linking method developed by Immunomedics, according to the biopharmaceutical company. The new "linkers" showed enhanced retention and improved targeting of the I-131–labeled antibody in a human lung cancer growing in mice. "Up to now, most therapeutic antibodies using I-131 have required individualized patient dosing because the isotope is detached quickly and distributes differently among patients," said Immunomedics' executive director of chemistry Gary Griffiths. "By improving retention in the tumor, we are hopeful that we have developed a more potent yet safer cancer therapeutic product, although considerably more animal clinical experimentation is needed." ease who underwent diagnostic catheterization at the Cedars-Sinai Medical Center in Los Angeles between 1992 and 1998. Patients who underwent myocardial perfusion SPECT imaging with Cardiolite within 60 days prior to catheterization had a lower rate (11.4 percent) of normal diagnostic catheterization compared to those who did not undergo the test (17.6 percent). This reduction was observed in both men and women.

For many of the 12 million Americans with coronary artery disease, catheterization-an invasive procedure in which a catheter is inserted through a patient's blood vessels to inject X-ray contrast material-is a routine step in diagnosis. "Our findings demonstrate that clinicians can utilize the Cardiolite test to help determine the next steps in patient care," said Daniel Berman, M.D., study investigator and director of nuclear cardiology at Cedars-Sinai Medical Center. "Nuclear imaging with Cardiolite has become highly useful in guiding management decisions of patients with suspected heart disease, especially when they exhibit unusual symptoms or the extent of their disease is unknown."