Biomedicine

Kathy A. Fackelmann reports from the 28th annual meeting of the American Society of Clinical Oncology in San Diego

New treatments for hairy cell leukemia

On the front lines of the cancer war, oncologists are reluctant to talk of a cure. Instead, they focus on remission, a state in which the patient has no signs of cancer. Now researchers report two successful methods of battling hairy cell leukemia, a rare cancer of white blood cells.

In the first study, Lawrence D. Piro and his colleagues at the Scripps Clinic and Research Foundation in La Jolla, Calif., recruited 147 men and women with hairy cell leukemia. The team gave the recruits a single, week-long infusion of an experimental drug known as 2-chlorodeoxyadenosine.

Piro's team discovered that a single course of this drug produced complete remission — no evidence of leukemic cells in the blood or bone marrow — in 126 of the patients. An additional 18 patients showed partial remission — no sign of malignant cells in the blood, but some lurking in the bone marrow. Three patients did not respond to the experimental treatment.

The researchers followed these patients for about 14 months, a time period too short to form conclusions about a long-lasting remission, Piro admits. "We'll have to wait a good 10 years to know whether patients are going to relapse," he says.

A second research team took a different tack with hairy cell leukemia. Michael R. Grever of the National Cancer Institute and his colleagues wanted to find out how patients would fare when treated with another experimental drug.

The multi-center research group found that deoxycoformycin (DCF) brought about complete remission in 104 of 152 patients. That gives DCF a better track record than interferon, the standard drug treatment for hairy cell leukemia. The team noted that just 17 of 153 interferon-treated patients showed complete remission.

In addition, patients treated with DCF had fewer relapses than those treated with interferon. Of the patients in complete remission, nine of 17 interferon patients relapsed between 12 and 43 months. By contrast, only seven of the 104 DCF patients showed signs of the disease 13 to 37 months after treatment, Grever told Science News.

Keeping colon cancer patients alive

Two and a half years ago, a team of researchers reported preliminary, yet dramatic, success with a double drug treatment aimed at a deadly type of colon cancer. Those same researchers now confirm the drug regimen's early promise.

Charles G. Moertel of the Mayo Clinic in Rochester, Minn., unveiled his group's results after studying 619 people with Stage C colon cancer for five and a half years. Stage C colon cancer is a lethal cancer that has spread to the lymph nodes. All the recruits had undergone surgery to remove the primary tumor as well as the cancerous lymph nodes. The team then assigned 315 patients to a group that got no further treatment. The remaining 304 recruits received postsurgical therapy consisting of the approved anticancer drug fluorouracil as well as levamisole, a drug long used as a worm treatment for animals.

Compared with patients who received surgery alone, people treated with the two drugs had a much better outlook: The drug duo reduced the rate of cancer recurrence by 41 percent and cancer-related deaths by 33 percent.

During his presentation, Moertel noted that the drug company Johnson & Johnson charges cancer patients \$1,495 for a year's worth of levamisole, while farmers who want the wormer pay just \$14 for the same amount.

Books

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The Aurora Watcher's Handbook — Neil Davis. This readable handbook answers questions about auroral display, beginning with such basics as what causes the aurora, where and when it is most often seen and how one can best capture it on film. The author's review of auroral science encompasses legends and myths as well as the several theories geophysicists have produced to explain why auroras behave as they do. Illustrated with cartoons, color plates and scientific drawings. U of Alaska Pr, 1992, 230 p., paperback, \$20.00

Challenging the Breast Cancer Legacy: A Program of Emotional Support and Medical Care for Women at Risk — Renee Royak-Schaler and Beryl Lieff Benderly. The authors, a research associate at the Georgetown University Comprehensive Breast Center and a health and psychology writer, outline a program to provide options for reducing the risk of breast cancer, to help readers cope with the emotional impact of the loss of a close relative, to determine their own level of risk and to find medical care and learn what questions to ask. With guidelines for early detection, diet and exercise and development of relaxation techniques. HarperCollins, 1992, 257 p., hardcover, \$20.00.

Dickson's Word Treasury: A Connoisseur's Collection of Old and New, Weird and Wonderful, Useful and Outlandish Words — Paul Dickson. This collection of words includes curses, opposites, acronyms, secret languages, body parts, sexual practices and a guide to pidgin English. For the *batrachivorous laclabphilist* (frog-eating cheese-label collector) as well as the garden variety *sesquipedalian logophile* (word-loving user of big words). Wiley, 1992, 378 p., paperback, \$14.95.

The Duke University Medical Center Book of Arthritis — David S. Pisetsky with Susan Flamholtz Trien. A professor of medicine and a writer specializing in health issues offer this accessible reference on the major forms of arthritis, with descriptions of causes, symptoms, diagnosis, treatment and prognosis. Includes an outline of the Duke Basic Arthritis Program to relieve symptoms and prevent complications, a chapter on unproven remedies and treatments and answers to frequently asked questions. Fawcett, 1991, 407 p., hardcover, \$22.50.

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(Visa or MasterCard Only) In D.C. Area: 202-331-9653 National Audubon Society North American Birdfeeder Handbook: The Complete Guide to Attracting, Feeding, and Observing Birds in Your Yard — Robert Burton. This comprehensive guide profiles 80 birds and is illustrated with more than 500 color photographs. It includes instructions on attracting, identifying and feeding birds, as well as on how to buy and build birdhouses, nestboxes and anti-squirrel devices. Dorling Kindersley, 1992, 224 p., hardcover, \$22.95.

Space Policy: An Introduction — Nathan C. Goldman. The author, an adjunct professor of space law and a lawyer specializing in issues of space law and high technology, examines the political and technological complexities surrounding the history and development of space policy. He covers international as well as U.S. interests and discusses space law, public opinion, the roles of government agencies and private industry and the civilian and military implications that space development has for our global society. lowa St U Pr, 1992, 321 p., hardcover, \$37.95

What's Left To Eat? — Sue Gebo. The author, a registered dietician and consulting nutritionist, explains scientific findings on food additives, natural toxins, carcinogens, salt, sugar, oat bran and a host of other foods and explains the difference between a "low-cholesterol diet" and "a diet that lowers cholesterol." She offers seasonal menus and recipes and concludes with a list of resources. McGraw, 1992, 278 p., paperback, \$12.95.

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