Mutations in the gene *BRCA1* have been found in women with breast cancer who were younger than 40 years and who had no family history of the disease, according to results from two separate studies.

The first study examined the genomic DNA for *BRCA1* mutations among 80 women diagnosed with breast cancer before the age of 35. Six of the 80 women were identified as having definite mutations in the *BRCA1* gene, and two of these six women had no family history of breast or ovarian cancer (or both). The researchers at the University of Washington and the Fred Hutchinson Cancer Research Center (Seattle, Wash) concede that limitations in the available assays used and the relatively low sensitivity of single-strand conformation polymorphism analysis (70% to 80%) may mean that the incidence of breast cancer in this study group is actually higher than the results indicate.

Separately, investigators at the Center for Cancer Risk Analysis and the Massachusetts General Hospital Cancer Center, Massachusetts General Hospital, Harvard School of Public Health, Farber Cancer Institute, Beth Israel Hospital, and Faulkner Hospital analyzed the *BRCA1* mutation in 30 women diagnosed with breast cancer before the age of 30. Of these women, 4 were shown to have definite, chain-terminating mutations; 1 woman had a missense mutation. A cohort of 39 Jewish women with breast cancer diagnosed before the age of 40 was examined separately. Of these women, 21% carried the 185delAG mutation, which is prevalent in the Ashkenazi Jewish population.

"This is an important finding," comments Richard Klausner, MD, director of the National Cancer Institute. "It takes genetic susceptibility the next step—from individuals who are members of preselected families with a history of cancer—and now looks at all young women."

Both studies are published in the January 18 issue of *The New England Journal of Medicine*.

Day 6 of the menstrual cycle appears to be the magic number for preventing ovulation with oral contraception. Preliminary results from a study involving five women found that ovulation was prevented in nine out of 10 cycles with the following oral contraceptive regimen: placebo (days 1 to 6); combination of 50 μg of ethinyl estradiol and 1.0 mg of norethindrone (days 6 to 10); 0.7 mg of norethindrone alone (days 11 to 19); and placebo (days 20 to 28).

The women were then given a second regimen beginning with a combination of 50 μg of ethinyl estradiol and 1.0 mg of norethindrone (days 8 to 12); and then 0.7 mg of norethindrone alone (days 13 to 21). With this schedule, ovulation was prevented in only 5 of the 10 cycles, reported researcher Gerard S. Letterie, MD, at the annual meeting of the American Society for Reproductive Medicine. The serum concentration levels of the luteinizing hormone and follicle stimulating hormone remained the same with both regimens.

When it comes to treating heroin addiction, buprenorphine-naltrexone may provide a more effective method with fewer long-lasting side effects than methadone.

In addressing the annual meeting of the American Academy of Psychiatrists in Alcoholism and Addictions, Thomas R. Kosten, MD, related that heroin-addicted patients who were given buprenorphine-naltrexone (4 mg) for 10 days and then allowed to administer as much heroin as desired took only half as much heroin as those patients who received placebo. When the buprenorphine-naltrexone dosage was increased to 8 mg, patients stopped taking the heroin altogether.

Compared with methadone, buprenorphine also was found to make detoxification less difficult for patients. Withdrawal symptoms lasted 5 days and were less severe than those associated with methadone. Overall, 43 (81%) of the 53 heroin-addicted patients included in this study remained heroin-free with the buprenorphine-naltrexone treatment. This rate closely matches that found with patients receiving clonidine-naltrexone (82%) while surpassing the 65% success rate of clonidine.

The US Food and Drug Administration has not yet approved buprenorphine-naltrexone.

Anorexia seems to have an effect on the cerebral blood flow, said researchers attending a conference on adolescent nutritional disorders, sponsored by the New York Academy of Sciences. Specifically, the amount of gray and white matter in the brains of girls with anorexia was found to be greatly reduced. Single photon emission computed tomography studies found significant changes in blood flow patterns to the temporal lobes.

Noted Debra Katzman, MD, of the Hospital for Sick Children and the Clarke Institute of Psychiatry (Toronto, Canada), the cerebrospinal fluid (CSF) ventricular volume was almost twice as great in the patients with anorexia nervosa, compared with control subjects. These findings are based on a study in which

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