Aspirin and Ovarian Cancer Risk

LAURIE LaRUSSO

An aspirin a day may reduce a woman's risk of ovarian cancer by 20 percent, according to a study published in the February issue of the *Journal of the National Cancer Institute*. Researchers analyzed data from 12 large studies within the Ovarian Cancer Association Consortium to evaluate whether women who used aspirin, nonaspirin nonsteroid anti-inflammatory drugs (NSAIDs) or acetaminophen had a lower risk of ovarian cancer than women who didn't take these drugs. All together the studies included nearly 8,000 women with ovarian cancer and nearly 12,000 women without it. In the seven studies that reported how often the women took these drugs, the risk of ovarian cancer was 20 percent lower among women who reported daily aspirin use compared with those who used aspirin less than once a week. A 10 percent lower ovarian cancer risk among women who took NSAIDs at least once per week compared with those who took NSAIDs less frequently was not statistically significant. Acetaminophen was not associated with reduced risk of ovarian cancer. In the three studies for which dose information was available, the reduced ovarian cancer risk was most strongly associated with low-dose (<100 mg) aspirin use, whereas the association between nonaspirin NSAIDs and lower ovarian cancer risk was stronger with high-dose (≥500 mg) usage.

Bevacizumab for Advanced Cervical Cancer

Adding bevacizumab to combination chemotherapy improves survival in women with advanced cervical cancer, according to a study published February 20 in the *New England Journal of Medicine*. In this randomized trial, researchers from several U.S. cancer research centers evaluated the effectiveness of combination chemotherapy (topotecan-paclitaxel or cisplatin-paclitaxel) with or without bevacizumab 15 mg/kg in 452 women with recurrent, persistent or metastatic cervical cancer treated at 164 institutions in the United States and Spain between April 2009 and January 2012. Because neither chemotherapy regimen was more effective than the other, the researchers combined these into one combined chemotherapy group for analyses. The median survival time increased from 13.3 months in among women treated with chemotherapy alone to 17.0 months among women treated with chemotherapy plus bevacizumab. Women who received bevacizumab had a 30 percent lower risk of dying during the mean 21 months of study follow-up. Bevacizumab did have a higher incidence of some side effects: grade 2 or higher hypertension (25 percent vs. 2 percent), grade 3 or higher thromboembolic events (8 percent vs. 1 percent) and grade 3 or higher gastrointestinal fistulas (3 percent vs. 0 percent).

Nuts and Pregnancy

For women who aren't allergic to peanuts or tree nuts, eating these nuts during pregnancy dramatically reduces the risk of peanut or tree nut allergy in the offspring, according to a study published in the February issue of *JAMA Pediatrics*. Researchers studied data on more than 10,000 children born between 1990 and 1994 in the Growing Up Today Study 2 (GUTS2). These children were the offspring of women who had participated in the ongoing Nurses' Health Study II, in which the women reported their dietary intakes during, or shortly before or after, their pregnancy. Some women who were allergic to only peanuts or only tree nuts did consume the type of nut to which they were not allergic. The children and their mothers answered questionnaires about their food allergies between 2004 and 2006, and the researchers reviewed their medical records to confirm food allergy diagnoses. From the 10,000 children in the GUTS2 study, 8,200 provided data for this analysis, 140 of whom had a physician-confirmed nut allergy. Among non-nutallergic mothers, consuming more nuts in the perinatal period lowered the risk of nut allergy in the child. Children born to non-nut-allergic mothers who ate nuts more than five times per month during the perinatal period had the lowest risk of nut allergy, 70 percent lower than the children of mothers who ate nuts less than once per month. Although the risk of nut allergy in children born to nut allergic mothers also decreased with increasing nut consumption, this association was not statistically significant. According to the study authors, these findings support the idea that early allergen exposure increases tolerance and lowers the risk of childhood food allergy.

Drug for Bone Mineral Density

According to a study published January 30 in the *New England Journal of Medicine*, taking the drug romososzumab increases bone mineral density in postmenopausal women. Researchers from the United States, Canada, Europe and South America randomly assigned 419 post-menopausal women with low bone mineral density and ages 55 to 85 years to receive one of the following eight treatments for 1 year: subcutaneous romosozumab monthly (70 mg, 140 mg or 210 mg) or every 3 months (140 mg or 210 mg), subcutaneous placebo or the currently available osteoporosis drugs oral alendronate (70 mg weekly) or subcutaneous teriparatide (20 μg daily). At all dose levels, romosozumab increased bone mineral density of the lumbar spine, total hip and femoral neck. The 210 mg monthly dose increased bone mineral density by 11.3 percent compared with for 4.1 percent for alendronate, 7.1 percent for teriparatide and 0.1 percent for placebo. Romosozumab was also associated with transient increases in biomarkers of bone formation and sustained decreases in a biomarker of bone resorption.

Laurie LaRusso, MS, ELS, is a freelance medical writer and an adjunct instructor in the Friedman School of Nutrition Science and Policy at Tufts University in Boston. The author reports no conflicts of interest or relevant financial relationships.

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