Weight loss and physical activity may help decrease pancreatic cancer risk.

Further studies are needed to determine whether acetaminophen reduces risk of ovarian cancer.

Kids are still being targeted by cigarette company advertising despite settlement.

News Briefs

ACETAMINOPHEN MAY REDUCE RISK OF OVARIAN CANCER

Once again, the question of whether analgesic use lowers cancer risk is in the news, as reported in a recent issue of Cancer Epidemiology, Biomarkers & Prevention (2001;10:903-906). In this study, regular use of acetaminophen (such as Tylenol®) was associated with lower ovarian cancer risk.

The study, conducted by Kristen B. Moysich, PhD, and colleagues from Roswell Park Cancer Institute in Buffalo, NY, compared 547 women diagnosed with ovarian cancer with 1,094 women who were admitted to the hospital for non-neoplastic conditions in the period between 1982 and 1998. The women in the study were predominantly white and they ranged in age from 20 to 90 years old.

Both groups completed a comprehensive questionnaire pertaining to their reproductive and medical histories, family histories of cancer, occupational and environmental exposures, tobacco and alcohol consumption, and diet.

The questionnaire also assessed analgesic usage—specifically aspirin and acetaminophen use—before the onset of their current illnesses. Those who took either analgesic at least once a week for six consecutive months were considered regular users.

Experts Remain Unclear on Its Chemopreventive Role

The study showed that the ovarian cancer risk for regular acetaminophen users was 44 percent lower than that of nonusers. Furthermore, the risk for women who took seven or more tablets per week was 68 percent lower than that of nonusers. And the longer the use, the more risk was reduced. Compared with nonusers, the ovarian cancer risk for long-term (11 years or more) and shorter-duration users (six months to 10 years) was reduced by 49 percent and 40 percent, respectively.

Although regular aspirin use has previously been associated with a lower risk of colon, esophagus, stomach, and other cancers, this study did not find any difference in ovarian cancer risk between women who regularly used aspirin and those who did not, regardless of frequency and duration of aspirin use.

Should physicians advise their patients to take acetaminophen as a cancer chemopreventive agent? No, says American Cancer Society (ACS) senior
epidemiologist Carmen Rodriguez, MD. 

Rodriguez is the lead author of an ACS Cancer Prevention II study of over 600,000 women published in Lancet (1998;352:1354-1355) that found a similar reduction of the ovarian cancer mortality rate in women who took daily doses of acetaminophen, and found no association between the ovarian cancer mortality rate and aspirin use.

Other studies support just the opposite conclusion, however. Their findings suggest that aspirin, but not acetaminophen, can protect women against ovarian cancer.

“As a group, these studies, including mine, that do show a decreased risk with the use of acetaminophen did not have a consistent dose response, and that is always a requirement,” says Rodriguez. “You need a proven, reproducible temporal relationship and a biological mechanism.”

So for now, there is lack of agreement as to whether acetaminophen lowers ovarian cancer risk. And no agreement has been reached as to how much is needed, and how it might work if it is indeed effective as an ovarian cancer chemopreventive agent.

Further Studies Needed

The Roswell Park researchers agree that study results have been inconsistent. Regarding a possible mechanism, some investigators have suggested that acetaminophen may have antigonadotropic activity. This hypothesis is supported by at least one study reporting reduced gonadotropin and estrogen levels in women who were regular acetaminophen users. Whether this is the mechanism by which acetaminophen may reduce ovarian cancer risk is still uncertain.

“Clearly, future research is needed to further explore this association,” the researchers write. “Laboratory investigations should be conducted to further define the biological mechanism by which acetaminophen might influence cancer risk.”

“The main message is that we really don’t know enough to recommend this for ovarian cancer chemoprevention,” says Rodriguez. “It’s an interesting finding that has already been seen in two other studies, but there’s still no understanding of how it works. Because acetaminophen is a nonprescription drug, many patients assume that it is completely safe. However, regular acetaminophen use, or overuse, can cause hepatotoxicity, especially in individuals with pre-existing liver disorders and those exposed to other hepatotoxins.”

TOBACCO ADS STILL AIMED AT KIDS; EXPERTS ADVISE STRONGER PROTECTIONS

Kids are still being targeted by cigarette company ads in spite of a 1998 court-approved agreement the companies signed to end the practice, says a report in the New England Journal of Medicine (2001;345:504-511).

The concession, made by tobacco companies as part of a Master Settlement Agreement of 46 states’ lawsuits against them, called for the companies not to “take any action, directly or indirectly, to target youth…” in their advertising or marketing, the researchers point out.

“But ‘targeting’ isn’t defined in the agreement, and the companies still are finding ways to reach kids with the message to smoke,” says lead study researcher Michael Siegel, MD, MPH, associate professor at Boston University’s School of Public Health.

Cigarette Ad Spending Goes Up One Year After Agreement

The study found that cigarette ad dollars spent in youth magazines actually increased in the year following the settlement—from $219 million in 1998 to $291 million in 1999. In 2000 cigarette ad spending dropped to $216 million—a drop of less than two percent from 1998 levels.

“And we found that cigarette brands that are popular among youth smokers are more likely to advertise in magazines that have higher levels of youth readership,” Siegel adds.