

## Long-term aspirin use prevents some cancer

Once a simple headache reliever, aspirin now tantalizes physicians with its apparent ability to prevent strokes and heart attack. In addition, growing evidence suggests that aspirin also slashes the risk of getting cancer of the colon or rectum (SN: 3/16/91, p.166; 12/7/91, p.374).

Yet a 1993 study of more than 22,000 male physicians raised questions about aspirin's effectiveness against colorectal cancer. Investigators found that participants who took an aspirin tablet every other day for 6 years developed that cancer as often as those who took a placebo (SN: 8/7/93, p.85).

Now, in a report that may clarify the drug's cancer-fighting skill, investigators argue that aspirin does indeed dramatically lessen the risk of getting colorectal cancer—but only if it is consumed regularly for a decade or more.

"By taking aspirin, after 20 years, you cut your risk almost in half," says Edward Giovannucci of Brigham and Women's Hospital in Boston.

Giovannucci and his colleagues at Harvard Medical School and Harvard School of Public Health in Boston dis-

cuss their research in the Sept. 7 *NEW ENGLAND JOURNAL OF MEDICINE*. In their analysis, they use the Nurses' Health Study, a biennial medical survey of female nurses begun in 1976.

The investigators divided the nurses into two groups: those who didn't take aspirin and those who consistently took two or more tablets every week. After documenting how many in each group got colorectal cancer over the years, Giovannucci and his colleagues calculated each group's cancer risk at various stages in the ongoing study.

The investigators found that nurses who took aspirin frequently for 20 years or more had a 44 percent lower risk of getting colorectal cancer than nurses who did not take aspirin. In contrast, those taking aspirin for 9 years or less enjoyed no discernible cancer protection.

Though the investigators report that women who consumed aspirin for 10 to 19 years lowered their risk of cancer by 30 percent, Giovannucci cautions that the study does not have enough statistical power to make that finding reliable.

"It does appear that duration of use is very important," says Peter H. Gann of

Northwestern University Medical School in Chicago, an epidemiologist who participated in the 1993 study.

Among the nurses taking aspirin for 20 years or more, those taking at least four to six tablets a week experienced the greatest reduction in colorectal cancer risk. Comparable doses appear to help the cardiovascular system, Giovannucci notes.

In a commentary accompanying the report, physician Aaron J. Marcus of New York Veterans Affairs Medical Center in New York City argues that there is now enough evidence of aspirin's cancer-fighting talent to warrant prescribing it for people at high risk of colorectal cancer.

But Marcus and other researchers still hesitate to suggest that the general population start popping an aspirin tablet every other day. Long-term low-dose aspirin therapy may have disadvantages that for some people outweigh the benefits, they note. For instance, Marcus says, "aspirin may cause unnecessary bleeding."

As investigators grow more confident in their belief that aspirin can prevent colorectal cancer, their research will focus more on how the drug achieves its surprising effect. "We have to find out why it takes so long to work," says Marcus. — *J. Travis*

## Drugs may provide abortion alternative

The combined action of two readily available drugs may offer U.S. women a medical alternative to surgical abortion. A study of an anticancer drug and an anti-ulcer drug showed that together they are as effective during early pregnancy as RU 486, the so-called French abortion pill, which remains illegal in the United States except for experimental uses.

The finding, published in the Aug. 31 *NEW ENGLAND JOURNAL OF MEDICINE*, promises to profoundly alter both the way physicians terminate pregnancy and the focus of the divisive abortion debate in the United States.

"There are millions of women in this country who would look to something like this," says study author Richard U. Hausknecht of the Mount Sinai School of Medicine in New York City.

"What's more," he adds, "this is a procedure that could be supplied by a nurse-practitioner under the supervision of a doctor, so in terms of availability and overall cost it could be a very exciting thing."

The method could offer women the opportunity to avoid strife-ridden abortion clinics and terminate their pregnancies in the privacy of their doctors' offices, possibly earlier than they could receive a surgical abortion. While neither drug carries Food and Drug Administration approval for use in abortion,

the agency doesn't prevent doctors from prescribing the drugs for "off-label" uses because both have obtained FDA approval as treatments for other conditions.

One drug, methotrexate, is widely prescribed to combat cancer and rheumatoid arthritis, while the other, misoprostol, enjoys popularity as a preventive against ulcers caused by common anti-inflammatory drugs.

Both drugs also act on women's reproductive systems. Methotrexate interferes with the vitamin folic acid and kills rapidly growing cells. For the past decade, physicians have prescribed methotrexate off-label to terminate ectopic pregnancies—the life-threatening condition in which fertilized eggs grow outside the uterus. Misoprostol causes uterine contractions and is sometimes used off-label to soften the cervix when inducing labor.

Last October, a small study published in the *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION* showed the drug combination's potential as a medical abortion agent. The current, larger study of 178 pregnant women affirms those results.

In Hausknecht's study, the women received an injection of methotrexate after being counseled about what to expect. They returned 5 to 7 days later to receive misoprostol vaginally. The participants then went home, where

cramping and bleeding began and the fetus was aborted, usually within 24 hours.

Of the 178 women, 171 (96 percent) had successful medical abortions. Twenty-five failed to abort with the first dose of misoprostol and required a second dose. Seven still failed to abort and required surgical abortion.

The women overwhelmingly preferred medical abortion to the surgical alternative and found the accompanying pain tolerable, says Hausknecht. But he points out that the procedure must be done by the ninth week of pregnancy; after that, excessive bleeding is likely.

Mitchell D. Creinin of the University of Pittsburgh School of Medicine and an author of the earlier study considers Hausknecht's work interesting but maintains that the study overstates the method's effectiveness.

For one thing, it fails to adjust for the 15 percent of all diagnosed pregnancies that miscarry spontaneously. What's more, Creinin points out, two-thirds of the women in Hausknecht's study received the treatment within 6 weeks of becoming pregnant, when the method may be more effective.

While the finding has generated great interest among doctors and women, Hausknecht urges physicians to "sit tight and not go off and do this" procedure before more information on it becomes available and doctors receive proper training. — *L. Seachrist*