ST. JOHN’S WORT INTERFERES WITH IRINOTECAN

St. John’s Wort is an herb commonly used around the world as a treatment for depression. Just because it is “natural” doesn’t mean it doesn’t have risks when it comes to treating cancer patients, according to an article and editorial in the August 21 issue of the Journal of the National Cancer Institute (2002;94:1247-1249;1187-1188).

The research, conducted in the Netherlands, was based on previous observations that St. John’s Wort increases levels of enzymes that can cause certain drugs to be processed more quickly than normal, weakening their effect.

Because irinotecan is processed through one of these enzyme systems, R. H. J. Mathijssen and his colleagues from the Department of Medical Oncology at the Daniel den Hoed Cancer Center in Rotterdam examined blood levels of irinotecan in patients who received this chemotherapy drug either with or without previous treatment with St. John’s Wort.

When the patients were given St. John’s Wort, the amount of irinotecan in the blood was decreased by 42 percent. The researchers also found that the reduction in the drug levels was greater the longer the patients had been taking St. John’s Wort. “Overall, our findings suggest that irinotecan metabolism and toxicity are altered by St. John’s Wort, and that the two agents cannot be given safely in combination without compromising overall antitumor activity,” wrote the authors.

They concluded that “until specific dosing guidelines are available, it is strongly recommended that patients receiving chemotherapeutic treatments with such agents refrain from taking St. John’s Wort.”

In an editorial that accompanied the article, Patrick J. Mansky, MD, and Stephen E. Straus, MD, from the National Center for Complementary and Alternative Medicine at the National Institutes of Health in Bethesda, MD, echoed the concerns of the study’s authors. “That herbal medicines may have adverse pharmacologic properties has come as a surprise to those who assumed that natural products must be safe,” wrote Mansky and Straus. They noted that cancer patients and their doctors must be aware that no matter how helpful some herbal treatments may appear, they are not all safe.

Major cancer centers, such as Memorial Sloan-Kettering Cancer Center (MSKCC) in New York, have been aware of the problems with herbal treatments for some time. Barrie Cassileth, PhD, who is the Chief of MSKCC’s Integrative Medicine Service and a member of the American Cancer Society’s Alternative and Complementary Methods of Cancer Management Advisory Group, said the message is clear. “We have to be careful about taking botanicals with radiation therapy, surgery, and chemotherapy,” said Cassileth. “At Memorial, we tell our patients to stop all herbal remedies during and for two weeks before treatment.”

Cassileth stressed the importance of doctors, nurses, and other health care workers telling patients about the need to stop herbal remedies before receiving treatments or undergoing surgery. “We tell patients to stop aspirin and vitamin E. We should also tell them to stop herbal remedies,” she said. What’s important to remember, concluded Cassileth, is that these recommendations are not the result of a bias against herbal remedies. This is a crucial issue, and the recommendations we make are based on hard data,” she said. “Herbs can be helpful, but they can also be very harmful.”

EFFORTS TO STOP TEEN SMOKING ARE PAYING OFF

Newly-released data, reported in the July 17 Morbidity and Mortality Weekly Report (2002;51: 409-412), indicated smoking among high school students peaked in the late 1990s, and is now declining. The data are from the Youth Risk Behavior Survey, a biennial Centers for Disease Control and Prevention (CDC) survey