The aspirin regimen

Editor’s note: The following editorial, written by ISU College of Pharmacy third-year student, Ryan K. Bitton, was originally published in the January/February edition of Pharmacy Student. Copyright American Pharmacists Association (APhA). Reprinted by permission of APhA.

by Ryan K. Bitton

For years, the apple regimen – “An apple a day keeps the doctor away” – has been touted as an underused means of prolonging life and keeping disease at bay. Repetition of this adage has reminded millions to add the fruit, or other fruits and vegetables, to their diet. For this reason, the regimen should not be dismissed as folklore. Also, apples provide vitamin A, vitamin C, iron, fiber, potassium and other nutritional staples, and it might very well be true that a daily apple could help keep one healthy. Might another daily regimen prove equally beneficial?

Might an aspirin a day keep heart disease away?

Aspirin has been proven clinically effective for secondary prevention of cardiovascular disease and significantly reducing the risk of death when taken during a suspected heart attack. The Second International Study of Infarct Survival (ISIS-2), reported in the August 13, 1988 issue of the Lancet, showed that aspirin can prevent 40 cardiovascular events per 1,000 patients with established cardiovascular disease. ISSIS-2 also showed that 23% of patients who take an aspirin during a suspected myocardial infarction are less likely to experience death. While the aspirin regimen is still underused in the United States, its benefits are fairly well known to the American public and health care professionals.

In light of such benefits, it is disappointing that all individuals with multiple risk factors for cardiovascular disease (hyperlipidemia, hypertension, smoking, obesity, physical inactivity, inherited risks) are not currently on an aspirin regimen. An opportunity to save lives is being wasted.

THE GAME PLAN

Reminding patients who are at risk for heart disease that they are in charge of their health is important. Suggesting strategies for smoking cessation, weight loss, exercise, compliance with drug therapy, and, when appropriate, taking an aspirin a day, is a primary responsibility for community pharmacists. Such practitioners should challenge their patients and colleagues to get involved.

To establish a protocol for ensuring that every patient who is identified as being at risk for cardiovascular disease receives a recommendation for starting an aspirin regimen, follow these steps:

**Step 1: Develop an understanding of aspirin’s mechanism of action and importance for preventing heart disease.**

Review current clinical studies that examined aspirin as preventive therapy and review aspirin’s mechanism of action and indications.

**Step 2: Identify patients with cardiovascular disease risk.**

Review non-modifiable cardiac risk factors, such as heredity, increasing age, gender, and the risk factors that can be changes, such as cigarette smoking/tobacco use, hyperlipidemia, hypertension, physical inactivity, and obesity. Also, perform a risk assessment and determine 10-year risk (go online to the American Heart Association at www.americanheart.org/presenter.jhtml?identifier=3003500).

Information on treatment guidelines and calculation risk are available from the National Heart, Lung, and Blood Institute at www.nhlbi.nih.gov.

**Step 3: Check the patient’s medication profile for possible drug interactions with aspirin, discuss**

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the possible adverse effects of aspirin use, recommend the aspirin regimen, discuss other means of cardioprevention, and tell patients to alert their doctor if they begin taking aspirin.

Discuss the importance of other means of preventing heart disease, such as losing weight, stopping tobacco use, getting more exercise, and eating better. Drug interactions are possible with anticoagulants, hypoglycemics, uricosuric agents, corticosteroids, acetazolamide, NSAIDs, and methotrexate. Possible adverse effects with aspirin are gastrointestinal bleeding and increased risk of hemorrhagic stroke. Recommend a low dose (81 mg to 325 mg) for a daily aspirin regimen.

If patients are compliant with the recommended aspirin therapy, lives will be saved by decreasing cardiovascular events and the pharmacist will shine in his or her role as one of the most trusted professionals in America. It must be noted that an aspirin regimen is not for everybody. Patients not at risk for heart disease or those taking contraindicated drug and herbal products, should consult their physician before initiating an aspirin regimen.

LESSONS FROM THE APPLE

“An apple a day” teaches people that small and simple health decisions can produce great health benefits. The same is true of aspirin. Coupled with other means of prevention or by itself, aspirin can truly save lives. The research has been done, the benefits have been established, and all that remains is for the aspirin regimen to find its way into the daily lives of the general public. And it is up to pharmacists and student pharmacists to make this happen.

Ryan K. Bitton is a third-year PharmD candidate at the Idaho State University College of Pharmacy.

New ISU alumni Internet site open

Idaho State University alumni are the beneficiaries of a new Internet site, Alumsys, which allows alumni to connect, reconnect, and interact with each other and the university from the comfort of their homes or offices.

Alumni can update their own information on the site, receive mentoring, list job opportunities and conduct job searches. The site was set up by Nuvek, an Internet technology company staffed by ISU alumni and an outgrowth of the ISU alumni owned and operated Varsity Contractors of Pocatello. The site is www.isu.alumsys.com or can be accessed through the Alumni Associations Web site, www.isu.edu/alumni/home.htm, which has a link on every page. The service is free for ISU alumni and those who attended ISU for at least 24 credit hours. Non-alumni can register for guest passes.

CE classes scheduled for spring ‘04

Idaho State University College of Pharmacy will host the following Continuing Education programs:

Post Falls, April 4, 2004 - 8:30 a.m. - 4 p.m.
Red Lion Templin’s Resort - Post Falls, Idaho

Pocatello, April 25, 2004 - 8:30 a.m. - 4 p.m.
Wood River Suite, ISU Student Union Building - Pocatello, Idaho

Boise, May 16, 2004 - 8:30 a.m. - 4 p.m.
Anderson Center, St Luke’s Regional Medical Center - Boise, Idaho

Cost: $75 Preregistration (includes refreshments, lunch, handouts and certificate)

$90 Onsite registration

Program Topics & Speakers:
Separating the Wheat from the Chaff: Obtaining Useful Information from Pharmaceutical Representatives - Christopher K. Johnson, PharmD

The Ups and Downs of Hypertension: A Review of JNC 7 - Barbara Novak, PharmD

Optimizing Pharmacy Performance: The Fundamentals of Financial Statement Analysis - Kerry Casperson, PhD

Contemporary Issues in Men’s Health - Roger Hefflinger, PharmD

The Cytochrome P450 System: Review and Clinical Implications - Cathy Heyneman, PharmD

Issues in Idaho Pharmacy Law - Mick Markuson, RPh

For more information, visit our Web site http://pharmacy.isu.edu/live/ce/live.html

TO SUSCRIBE TO THE COLLEGE OF PHARMACY REFILL, VISIT http://pharmacy.isu.edu/live/alumni/
Dean Joseph Steiner cordially invites you to the Idaho State University College of Pharmacy Alumni Reception

In conjunction with the American Pharmaceutical Association (APhA) Annual Meeting and Exposition

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Sunday, March 28th 2004
5:30 – 7:00 p.m.
Westin Hotel
Cascade Room 1A
1900 5th Ave
Seattle, Washington

Hors d’oeuvres & hosted bar
sponsored by the ISU College of Pharmacy

www.pharmacy.isu.edu
208.282.3655

(Attendance at the APhA annual meeting is not required)