A summary of general medicine news that affects your patients, your practice, and you.

Combination Pill May Significantly Reduce Heart Risks

A single pill containing a low-dose statin, low-dose aspirin, and three commonly used blood pressure medications reduced the risk of heart disease and stroke roughly by half for middle-aged individuals with no known cardiovascular disease, according to a study published online in *The Lancet*. The drug, called Polycap, is an experimental combination therapy formulated by Cadila Pharmaceuticals in Ahmedabad, India.

Study leader Salim Yusuf, MD, of McMaster University in Hamilton, Ontario, Canada, and colleagues conducted a double-masked trial in 50 centers in India. Individuals (n=2,053) without cardiovascular disease, aged 45 to 80 years, and with one cardiovascular risk factor, were randomly assigned to receive the Polycap (n=412), consisting of low doses of thiazide (12.5 mg), atenolol (50 mg; Tenormin, AstraZeneca Pharmaceuticals, LP), ramipril (5 mg; Altace; King Pharmaceuticals), simvastatin (20 mg; Zocor; Merck & Co., Inc.), and aspirin (100 mg) per day, or were placed in one of eight groups of 200 and given individual components of the pill or various combinations for 12 weeks.

Compared with groups not receiving blood-pressure-lowering drugs, Polycap reduced systolic blood pressure by 7.4 mm Hg and diastolic blood pressure by 5.6 mm Hg. Similar results were seen when three blood-pressure-lowering drugs were used with or without aspirin. Reductions in blood pressure increased with the number of drugs used (2.2/1.3 mm Hg with one drug, 4.7/3.6 mm Hg with two drugs, and 6.3/4.5 mm Hg with three drugs). Polycap also reduced low-density lipoprotein cholesterol by 0.70 mmol/L, which was less than with simvastatin alone (0.83 mmol/L; P=.04). Reductions in heart rate with Polycap and other groups using atenolol were similar (7 beats per min), and both were significantly greater than groups without atenolol (P<.0001). Furthermore, the investigators found that reductions in 11-dehydrothromboxane B2 were similar with the Polycap (283.1 ng/mmol creatinine) compared with the three blood-pressure-lowering drugs plus aspirin (350 ng/mmol creatinine), and with aspirin alone (348.8 ng/mmol creatinine), compared with groups not receiving aspirin.

Patients treated with Polycap did not demonstrate evidence of intolerability, the study authors said.

Statin Found to Reduce Risk of Blood Clots

A large study suggested that the cholesterol-lowering drug rosuvastatin (Crestor; AstraZeneca, Inc.) reduces the risk of deep vein thrombosis, according to a report in the *New England Journal of Medicine*.

The study, called Jupiter, and led by researchers at Brigham and Women's Hospital in Boston, evaluated the effects of rosuvastatin in people without high cholesterol or histories of heart disease. Healthy participants (n=17,802; men aged ≥ 50; women aged ≥ 60) in 26 countries were randomized to receive rosuvastatin or placebo.

After a mean follow-up of less than 2 years, the investigators found that relatively healthy people taking rosuvastatin were 43% less likely than those who took placebo to have venous thromboembolism. Individuals taking rosuvastatin had a lower risk of heart attack, stroke, and other related problems as well as lower cholesterol and low C-reactive protein (CRP) levels. In total, 94 blood clots formed during the study, 60 of which were in the placebo group and 34 in the rosuvastatin group, the study found.

Past studies have found that rosuvastatin raises the risk of muscle deterioration and kidney problems. These adverse effects were not observed, the researchers said. However, a small increase in diabetes was found.

Carcinogens Found in Baby Products

Some children's shampoos, lotions, soaps, and other personal care products are linked to cancer and skin allergies, according to lab tests commissioned by the Campaign for Safe Cosmetics (CSC).

Of the baby products tested, the CSC found that 61% contained formaldehyde and 1,4-dioxane—two chemicals that the Environmental Protection Agency considers

to be probable carcinogens. The lab tests found that the products tested were contaminated with one or the other chemical, and sometimes both, a news release said.

Of the 48 baby and child personal care products tested for 1,4-dioxane, 32 (67%) were found to contain the chemical. Of the 28 products tested for 1,4-dioxane and formaldehyde, 17 (61%) contained both chemicals, and 23 (82%) contained formaldehyde.

According to the CSC report, manufacturers can easily remove the toxic byproduct, but are not required by law to do so because the US Food and Drug Administration does not regulate formaldehyde and 1,4-dioxane.

Anticlotting, Heartburn Drugs Dangerous When Taken Together

Patients who take the anticlotting drug clopidogrel bisulfate (Plavix; Bristol-Myers Squibb Co. and Sanofi-Aventis SA) in combination with proton pump inhibitors (PPI) are at increased risk for a cardiovascular event such as heart attack, according to a report in the *Journal of the American Medical Association*.

Lead investigator P. Michael Ho, MD, a cardiologist at the Denver VA medical center, and colleagues evaluated more than 8,000 patients discharged from 127 Veterans Affairs hospitals between October 2003 and January 2006. They found that patients taking a combination of clopidogrel bisulfate and a PPI had an increased risk of adverse outcomes compared with those taking clopidogrel bisulfate alone.

More than 5,200 patients were given clopidogrel bisulfate and a PPI, while the rest were prescribed clopidogrel bisulfate alone. Patients were followed for approximately 18 months. The study found that 29.8% of patients in the clopidogrel bisulfate plus PPI group were rehospitalized or died from cardiovascular problems compared with 20.8% of patients taking clopidogrel bisulfate alone.

According to a spokeswoman for Bristol-Myers Squibb, Squibb and Sanofi-Aventis are working with the US Food and Drug Administration and conducting studies to determine the factors that may influence clopidogrel bisulfate-PPI drug interaction.

Prostate Test May Be of Little Help in Cancer Detection

Screening for prostate cancer with a blood test may have no or little benefit in detecting the disease, according to interim results from two studies in the *New England Journal of Medicine*. One study, conducted in Europe, found that screening provided moderate benefits in lowering death rates, but with the high cost of side effects. The other, a US study, did not identify any benefits. Both studies began in 1993.

The US study included 77,000 men aged 55 to 74. The trial compared a group of men who were encouraged to be regularly screened for PSA and with a rectal examination (85% were screened) with a control group that received prevailing medical practices, or about a 50% rate of screening. At 7 to 10 years follow-up, men in the screening group were 22% more likely to have prostate cancer detected. However, the rates of prostate-cancer deaths were nearly the same—roughly 200 deaths per million men each year.

An interim look at seven European studies that together enrolled 162,243 men, age 55 to 69, found a modest benefit from routine screening after about 9 years of follow-up. Men in the screening group had an annual death rate from prostate cancer of 350 deaths per million men, compared with 410 deaths per million men in the control group, the study said. However, according to the European data, roughly 47 men would be unnecessarily treated for every life saved.

Cyclosporine Absorption Blocked by Licorice

An ingredient in licorice appears to block the absorption of cyclosporine, a drug used by transplant patients to prevent organ rejection, according to chemists at the China Medical University in Taichung, Taiwan. This drug interaction could potentially result in transplant rejection, illness, and even death, the researchers said in a news release.

In previous studies, licorice, which is widely used in various foods and herbal medicines and used by some alternative health care providers to treat the common cold, stomach ulcers, and liver disease, has been shown to interfere with the effectiveness of high blood pressure medications, aspirin, antiinflammatory drugs, insulin, and oral contraceptives, the news release said.

Pei-Dawn Lee Chao, PhD, and colleagues fed cyclosporine to laboratory rats with and without various doses of pure glycyrrhizin (the active ingredient in licorice) and natural licorice extract. Cyclosporine levels reportedly dropped in the rats fed licorice or glycyrrhizin. It is not yet known why licorice interferes with cyclosporine or how much licorice must be consumed to have a toxic effect in humans.

Hot Tea Drinkers at Increased Risk of Esophageal Cancer

A population based case-control study of residents of Golestan province in northern Iran found that drinking hot tea was strongly associated with an increased risk of esophageal cancer, according to a study in *BMJ*. Golestan province reportedly has one of the highest rates of esophageal squamous cell carcinoma in the world.

An international group of researchers led by scientists from Iran recruited 300 esophageal cancer patients who were diagnosed at a gastrointestinal specialty clinic in Golestan and compared them with 571 healthy controls matched for age, gender, and place of residence. Tea-drinking patterns were evaluated.

The researchers found that people who said they drank hot tea at temperatures of 149° to 156° Fahrenheit were more than twice as likely to develop esophageal cancer as people who said they drank warm or lukewarm tea at less than 140°. Those who said they drank their tea very hot, at least 158°, were more than eight times as likely to get esophageal cancer, according to the study.

The researchers also determined that people who waited 2 to 3 minutes to drink the tea after pouring it were nearly 2.5 times more likely to develop the cancer compared with people who said they waited at least 4 minutes. Those who waited less than 2 minutes were 5.4 times more likely to be diagnosed with esophageal cancer, the study found.

Inhaled, Oral Corticosteroids May Increase Cataract Risk

The combined use of inhaled and oral corticosteroids increases patients' long-term risk of developing posterior subcapsular cataracts and nuclear cataracts, according to a report in *Ophthalmology*.

Jie Jin Wang, MMed, PhD, at the University of Sydney and fellow researchers with the Blue Mountains Eye Study used questionnaires to assess 3,654 participants' use of inhaled and oral corticosteroids at baseline. Those who used these medications for at least 1 month in the past but were not using them at baseline were considered past users. Participants who were taking these medications at baseline and had been doing so for at least 1 month were considered current users.

The investigators examined all participants (aged 49 years or older) from 1992 through 1994 for nuclear, cortical, and posterior subcapsular cataracts. After 5 years, 2,335 participants were reexamined; after 10 years, 1,952 were re-examined.

At baseline, 103 participants were current users, and 120 were past users of inhaled corticosteroids, and 31 were current and 147 were past users of oral corticosteroids. Over the 10-year follow-up period, current users had a greater risk of developing posterior subcapsular and nuclear cataracts but not cortical cataracts, the researchers said. The interaction between inhaled and oral corticosteroid use was significant for the incidence of posterior subcapsular cataracts (P=.01) and nuclear cataracts (P=.02). In subgroup analyses, the investigators found that only individuals who used both inhaled and oral corticosteroids were at increased risk of developing posterior subcapsular cataracts.

Bill Introduced to Lower the Price of Prescriptions

The Pharmaceutical Market Access and Drug Safety Act was recently introduced to Congress as a measure to reduce the cost of prescription drugs in the United States. If passed, the legislation will allow US-licensed pharmacies and drug wholesalers to import FDA-approved medications from Canada, Europe, Australia, New Zealand, and Japan. Prescriptions in these countries are 35% to 55% lower in cost than in the United States.

According to a news release, the Congressional Budget Office estimates that the bill would save American consumers $50 billion over the next decade and the federal government more than $10 billion. The legislation would also allow individual consumers to purchase prescription drugs at their local pharmacy and from safe, reliable, FDA-inspected Canadian pharmacies.

The bill, which was written by US Senators Byron Dorgan (D-ND), Olympia Snowe (R-ME), John McCain (R-AZ), and Debbie Stabenow (D-MI), includes safeguards to prohibit drug counterfeiting and practices that would put the consumer at risk. Furthermore, the legislation applies only to FDA-approved prescription drugs produced in FDA-approved plants from countries with comparable safety standards. ■

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