

an alternative to estrogen therapy. Among the most promising classes of drugs are bisphosphonates and calcitonin. Although not superior to estrogen in efficacy, both of these classes are considered safe and effective, based on results to date from current clinical trials. The drugs have not yet been approved by the US Food and Drug Administration (FDA) for this use.

"The new bisphosphonates appear more effective and probably safer than the earlier versions," Marjorie Luckey, MD, told attendees of the Third International Symposium on Osteoporosis held in Washington in March. Dr Luckey is the director of the Osteoporosis and Metabolic Bone Disease Program of the Mount Sinai Medical Center in New York.

Among the most promising of the bisphosphonates appears to be alendronate. In clinical tests, the drug demonstrated a 5% and 2% increase in bone density during the first and second years of therapy, respectively. Because the clinical trials have not been conducted long enough, no data are yet available regarding the drug's ability to decrease the rate of bone fractures.

Calcitonin in nasal spray form has also been shown effective in reducing the rate of bone fractures in one European study, conducted by Claus Christiansen, MD, of the Center for Clinical and Basic Research in Ballerup, Denmark. Dr Christiansen said that in his study, participants had an increase in bone mass of 2% to 3% annually. Hip fractures were reduced by two thirds.

In the United States, this hormone is available only in an injectable form.

Other possible alternative treatment regimens for osteoporosis presented at the meeting are cal-

cium and vitamin D and, separately, sodium fluoride. Synthetic hormones are also expected to play a role in therapy for osteoporosis by the next century. Specifically, raloxifene has been found in clinical trials to be similar to estrogen but without stimulating the growth of endometrial tissue as does estrogen.

Another promising treatment regimen for osteoporosis

is being successfully tested by researchers at the University of Texas Southwestern Medical Center in Dallas. In an ongoing clinical trial, 99 female patients with postmenopausal osteoporosis have been randomly assigned to receive either a slow-release sodium fluoride (25 mg twice a day) or placebo in repeated 14-month cycles, including a 2-month break from the therapy. Participants in both groups are receiving calcium citrate (400 mg twice a day) continuously.

Among women in the treatment group, mean femoral bone density as measured by densitometry increased 4.1% and 2.1% during the first two cycles, as compared with femoral bone density in women taking placebo. Radial bone density did not change. Meanwhile, the incidence of new and current vertebral fractures decreased by approximately 52% in women receiving the slow-release sodium fluoride compared with that in women receiving placebo. Overall, the frequency of side effects experienced by subjects in both groups was not statistically significant.

"This study suggests that at the lower doses of fluoride that [the researchers] used, using different formulations of the drugs, and using their schedule of treatment, that fluoride may be helpful," comments

B. Lawrence Riggs, MD. Dr Riggs, of the Mayo Clinic, conducted earlier research that questioned the benefits of fluoride treatment for osteoporosis. Of this current work, Dr Riggs says, "This is good, solid work, and it should encourage others to do more research on fluoride and osteoporosis."

The April 15 issue of *Annals of Internal Medicine* features this study.

In an attempt to create a tobacco-free environment, the American Academy of Pediatrics (AAP) has issued a policy statement from its Committee on Substance Abuse.

Among the AAP's recommendations are for pediatricians to:

- inquire during parents' prenatal visits as to their smoking behavior;
- avoid smoking and using tobacco products at all, but especially in front of their patients;
- advise patients against smoking early—before they enter junior high school;
- participate in community anti-smoking campaigns and support the Model Sale of Tobacco Products to Minors Control Act of 1990, which prohibits the sale of tobacco products to persons younger than 19 years;
- support a ban on all tobacco advertising, including print and broadcast media.

The proposed recommendations also call for outlawing tobacco use on school campuses as well as increasing the excise tax on tobacco products and ending government subsidies to tobacco farmers.

The May issue of *Pediatrics* includes the complete text of the committee's recommendations. ♦