

Ibandronate Gentler on Cancer Patients' Kidneys

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SAN ANTONIO — Ibandronate seems to be easier on the kidneys than are other bisphosphonates in cancer patients who take the drugs for bone metastases, and may even help normalize renal function in patients whose kidneys declined with zoledronic acid treatment.

The studies, presented at the Sixth International Meeting on Cancer-Induced Bone Disease, suggest that the drug may be living up to its clinical trial promises, Dr. Jörg Seraphin said.

"These data suggest that the renal safety profile of ibandronate in phase III trials transfers to actual clinical practice," he wrote in a poster at the meeting, which was sponsored by the Cancer and Bone Society.

Dr. Seraphin presented initial results from a 24-week observational study conducted in 157 centers in Germany. The analysis included 913 patients with breast cancer that had spread to bone; the study is expected to enroll 1,500 patients.

All of the women received ibandronate, with 88% receiving standard intravenous therapy (6 mg every 2 weeks), 10% receiving oral therapy (50 mg per day), and 2% receiving both IV and oral ibandronate. Most of the patients (549) had not taken any previous bisphosphonates, 93 had previously taken ibandronate, and 271 had previously received other drugs in the class.

Patients had serum creatinine measures taken at baseline and at 24 weeks. Patients and physicians also rated tolerability for both forms of ibandronate.

At baseline, patients who had previously received other bisphosphonates had slightly—but not significantly—higher serum creatinine levels. During treatment, the mean values remained stable among all three groups. However, the maximum creatinine increase in the group previously treated with other bisphosphonates was four times higher (4.2 mg/dL) than the maximum increase in the bisphosphonate-naïve or prior-ibandronate groups (1.2 mg/dL and 1 mg/dL, respectively).

"This effect is likely due to the renal toxicity of other bisphosphonates, which have been confirmed in other studies," wrote Dr. Seraphin, a hematologic oncologist in a joint practice in Northeim, Germany.

Almost all physicians (98%) and patients (96%) rated ibandronate's tolerability as good or very good. The drug was also effective in maintaining bone: 90% of patients did not have a fracture during the study.

A retrospective study hinted that switching to ibandronate could help normalize impaired kidney function associated with zoledronic acid treatment in cancer patients with bone metastases. The study—by Dr. Ingo Diel of the Institute for Gynecological Oncology, Mannheim, Germany—included 106 patients. Of these, 72 received ibandronate monotherapy, and 34 were switched to ibandronate from zoledronic acid, most (65%) because of impaired renal function.

The patients' average age was 65 years; 61 had breast cancer, 38 had multiple myeloma, 3 had non-small cell lung carcinoma, and 4 had prostate cancer. In

both treatment groups, the mean baseline serum creatinine level was 1 mg/dL and the mean glomerular filtration rate was 75 mL/min per 1.73 m².

Compared with ibandronate-only patients, patients in the switch group were more than seven times as likely to have an increased serum creatinine level, and more than four times as likely to have an impaired glomerular filtration rate.

However, the incidence of these markers of impaired renal function tended to de-

crease with longer ibandronate treatment, Dr. Diel said. Switching patients showed a significant increase in serum creatinine levels during their zoledronic acid treatment period (1 mg/dL to 1.4 mg/dL), which declined linearly to just over 1 mg/dL by 24 months of ibandronate treatment.

There was a potential survival bias in this evaluation, Dr. Diel noted. "Patients who survived for longer periods were more likely to have better renal function attributable to their overall condition, and

not due to bisphosphonate treatment."

Serum creatinine levels remained stable over 24 months in the ibandronate-only patients, he added.

"These results suggest that treatment with zoledronic acid may be associated with renal deterioration, which may recover over time when the patient is switched to ibandronate. It warrants future investigation whether initiating treatment with ibandronate rather than zoledronic acid limits renal deterioration." ■

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