Studies Provide Comparative Data on Antidepressant Safety and Efficacy

By Bridget M. Kuehn

Sertaline may be more effective than cognitive behavioral therapy (CBT) for treating depression in patients on dialysis, according to a study at Kidney Week 2018. Another study found elevated heart risks with selective serotonin reuptake inhibitors (SSRIs) with greater QT-prolonging effects. Almost one-quarter of patients on dialysis have depression, but many don’t receive treatment, said Rajnish Mehrotra, MD, professor of medicine at the University of Washington in Seattle. One obstacle has been the dearth of data on depression treatment in patients on dialysis, who are typically excluded from clinical trials of antidepressants in the general population, noted Magdalene Assimon, PharmD, PhD, a postdoctoral fellow at the University of North Carolina Kidney Center in Chapel Hill. There have been few studies specifically exploring the comparative efficacy or safety of antidepressant therapies in patients on dialysis.

“We extrapolate both efficacy and safety evidence [from trials in other populations], which may or may not apply to patients on dialysis because of their unique situation with drug pharmacokinetics and their cardiovascular burden,” Assimon said.

But the two studies presented at Kidney Week 2018 may help begin to close the knowledge gap.

CBT versus sertraline

During the High Impact Trials session, Mehrotra presented results of a multi-center randomized trial that began with depression screening for 2569 patients in 41 dialysis facilities across 3 metropolitan areas. The 636 patients with Beck Depression Inventory (BDI) scores greater than or equal to 15 were randomized to receive either a motivational interview about depression treatment or a brief encounter with a research staff member who alerted patients to their depression and asked if they would like to participate in a treatment study. The study found no significant difference in treatment initiation between those two groups (66% vs. 64%, respectively).

“It is possible that we pre-selected individuals [who] were interested in getting treatment anyway, and that is why we were not able to show a difference between people randomized to engagement versus control,” Mehrotra said.

The 120 patients who decided to initiate therapy were then randomized to CBT or the SSRI sertraline. Patients receiving CBT were given the option of having a therapy session during dialysis or a separate private session. Both groups saw a decline in depression symptoms, but sertraline resulted in a greater decrease in depression symptoms as measured by the Quick Inventory of Depressive Symptomatology (QIDS-C) |1.84 compared with CBT. Patients on sertraline also had more improvement on measures of disability, energy/vitality, life satisfaction, and sleep.

“In patients undergoing hemodialysis with major depressive disorder, depressive symptoms improved both with individual CBT and sertraline, but improvement was greater with sertraline,” Mehrotra said.

However, sertraline was associated with a higher frequency of adverse events, he noted. Patients who received sertraline were more likely to be hospitalized and had threefold more mild and moderate adverse events than those receiving CBT. Mehrotra said he hopes the results help guide clini-