PROJECT INFORMATION

Comparing Two Treatments for Depression among Patients with Kidney Failure Receiving Hemodialysis -- The ASCEND Study

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What was the research about?

In patients with kidney disease, the kidneys don't work well to remove waste from the blood. Some people with kidney disease have kidney failure and have lost most of their kidney function. These patients often receive dialysis, a treatment with a machine that cleans the blood. Patients usually go to a dialysis center for this treatment, about three times each week. Depression is common in people with kidney failure who receive dialysis.

In this study, the research team compared how likely patients were to start treatment for depression after talking with a therapist during a dialysis visit versus getting dialysis as usual. For patients who did start treatment, the team compared two treatments for depression in patients getting dialysis:

- Cognitive behavioral therapy, or CBT, a type of talk therapy. In CBT, patients learn to change patterns in their thinking to improve how they feel.
- Sertraline, a medicine used to treat depression.

What were the results?

After 12 weeks of treatment, both sertraline and CBT reduced symptoms of depression. The two treatments worked about the same.

Compared with patients who had CBT, patients treated with sertraline scored better on surveys that asked about their quality of life, including how much energy they had and how well they slept.

Attendance at dialysis sessions was similar for patients getting either treatment for depression.

Who was in the study?

The study included 184 patients with kidney failure getting dialysis at centers in three large cities in New Mexico, Texas, and Washington State. Of these patients, 120 wanted to receive treatment for depression. Forty-three percent of these patients were white, 28 percent were black, and 21 percent were another race; 28 percent were Hispanic. The average age was 51, and 57 percent were men.

What did the research team do?

The research team assigned patients by chance to one of two groups. In one group, patients met with a therapist during one of their dialysis sessions. The therapist asked them about their symptoms of depression and concerns about treatment. In the other group, patients received dialysis but did not meet with a therapist.
The research team then assigned patients who wanted to start treatment for depression by chance to one of two groups. In one group, patients took sertraline for 12 weeks. Patients could fill their prescriptions at the dialysis center. In the second group, the team scheduled patients for 10 one-on-one CBT sessions with a trained therapist. The sessions took place over 12 weeks during dialysis.

Patients completed surveys about symptoms of depression and quality of life before treatment started and again 6 and 12 weeks later.

Patients with kidney disease, doctors, nurses, social workers, and managers of dialysis centers helped design the study.

**What were the limits of the study?**

The study didn't look at how well the treatments worked compared with no treatment. As a result, the research team can't say for sure that changes were because of either treatment. The research team didn't look at the effects of treatment beyond 12 weeks.

Future research could study whether combining sertraline and CBT is more effective than either treatment alone.

**How can people use the results?**

Patients on dialysis and their doctors can use the results when considering treatments for depression.

*To learn more about this project, visit [www.pcori.org/Mehrotra209](http://www.pcori.org/Mehrotra209).*