Comparing Pain Management for Sickle Cell Disease Crises in Emergency Rooms and Infusion Centers

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What was the research about?
Sickle cell disease, or SCD, is an inherited blood disease. In SCD, blood cells have a sickle shape. They may lodge in small blood vessels, causing sudden, severe pain called an SCD crisis. An SCD crisis can happen without warning. To get relief, patients often get treatment in an emergency room, or ER. Patients having an SCD crisis can also get treatment in infusion centers. At these special clinics, doctors and nurses are trained to give care to patients with SCD.

In this study, the research team compared patients’ experiences getting treatment for an SCD crisis in ERs and infusion centers.

What were the results?
Compared with patients treated in ERs, patients treated in infusion centers

- Waited less time for pain medicine, about half as long as patients in the ER
- Were more likely to have their pain rechecked within 30 minutes of receiving the medicine
- Were less likely to be admitted to the hospital
- Were more satisfied with their care and felt safer

What did the research team do?
The research team recruited people with SCD to take part in the study during their regular clinic visits. Patients could choose to go to either an ER or an infusion center during any SCD crisis during the study.

The research team looked at patients’ health records over 18 months to compare treatment in ERs and infusion centers. Patients also filled out a survey about how satisfied they were with their care and how safe they felt when receiving care.

Patients with SCD, parents and children of patients with SCD, advocacy groups, and a representative from a health insurance company worked with the research team on the study.

What were the limits of the study?
The study looked only at care for SCD crises. Results might not apply to other types of care for SCD.

Future research could compare care at ERs and infusion centers for other SCD complications.

How can people use the results?
People with SCD can use the results when considering where to get care for an SCD crisis. Hospitals can use the results when thinking about whether to offer infusion centers for patients with SCD.

To learn more about this project, visit www.pcori.org/Lanzkron027.