Does Information on Benefits and Risks Help Patients Decide Between Stent Options?

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What was the research about?
Narrow or blocked blood vessels in the heart can cause chest pain, shortness of breath, or a heart attack. Stents are small mesh tubes placed inside a narrow or blocked blood vessel to keep blood flow to the heart open. There are two types of stents. Bare-metal stents help keep blood vessels open. Drug-eluting stents also have a special drug coating to help reduce the chance of the blood vessel becoming blocked again. However, patients who use drug-eluting stents also need to take a pill that increases the risk of bleeding and bruising. Patients don’t often talk with their doctors about which stent to use.

The research team wanted to learn if patients who reviewed information about their personal benefits and risks would be more likely to discuss stent options with their doctors. The team compared different ways to encourage patients and doctors to make decisions about stents together:

- Patients reviewed information about their personal benefits and risks of both types of stents and received coaching from a nurse, called a decision coach
- Patients reviewed information about their personal benefits and risks of both types of stents without a decision coach
- Patients received usual care, which was a personalized consent form without educational materials about stent trade-offs

What were the results?
Compared with patients who received usual care, patients who had a decision coach were more likely to:

- Discuss stent options with their doctor
- Know more about stents
- Say which stent they wanted

The team found no differences between patients who reviewed benefits and risk information without a decision coach and those who received usual care.

In all three groups, patients who said they wanted drug-eluting stents received them 98 percent of the time. Patients in all three groups who said they wanted bare-metal stents received these stents 53 percent of the time.

Who was in the study?
The study included 331 patients from two hospitals in Kansas City, Missouri. Of these patients, 80 percent were white and 20 percent were African American. The average age was 67, and 64 percent of patients were male.

What did the research team do?
While patients were getting ready for their stent procedure, the research team assigned them to one of three groups. Two groups received information about their personal benefits and risks with the two kinds of stents. Only one of these groups received coaching...
from a trained nurse. The third group received usual care.

The research team interviewed all patients before and after their procedures. The team asked patients about the benefits and risks of each stent, whether patients told their doctors which stent they wanted, and how the talk with the doctor or nurse went.

Patients, clinicians, and a health insurance representative gave the research team feedback throughout the study.

What were the limits of the study?
Patients who reviewed the benefit and risk information may not have had enough time before their procedures to reflect on the information and fully take part in deciding which stent they wanted. Giving the information to patients earlier may have changed the results. Hospital nurses often didn't have enough time to provide coaching and nurses from the research team had to fill in at one of the hospitals.

Future research could explore ways to give the information to patients earlier or look into why patients who said they wanted bare-metal stents didn't always receive these stents.

How can people use the results?
Hospitals that do stent procedures could consider offering patients information about their benefits and risks with decision coaching, to help patients participate in decisions about which type of stent to get.

To learn more about this project, visit pcori.org/Spertus092.