Research BRIEF

FOUNDATION FOR INFORMED MEDICAL DECISION MAKING

An interactive decision aid fosters improved treatment decision-making by patients with ischemic heart disease.

Overview

This randomized, controlled trial evaluated the effects of an interactive decision aid on the treatment decisions of 240 patients with ischemic heart disease. Investigators found that patients whose consultation included the decision aid were more knowledgeable about relevant information and less likely to choose revascularization than control patients. Patients who used the decision aid also demonstrated greater decision-making autonomy than controls.

Background

Ischemic heart disease remains a common cause of death among adults. In severe cases, revascularization with coronary artery bypass surgery or angioplasty is the preferred treatment, based on a demonstrated survival advantage with these interventions. In less severe cases, the optimal treatment is less clear, and the choice between revascularization and medical management must be guided by other factors, including patient preference.

Research has shown that patients who use decision aids are better-informed and more satisfied with the decision-making process. In an observational study, patients described the Ischemic Heart Disease Shared Decision-Making Program (IHD SDP) as helpful and were more confident in their treatment choice after its use.

Objective

To assess the effectiveness of a decision aid in communicating surgical options for early stage breast cancer To evaluate the effect of an interactive decision aid on patient decision-making.

Methods

- **Patient population:** Adult males with ischemic heart disease confirmed by coronary angiography that could be treated either with revascularization (ie, bypass surgery or coronary angioplasty) or with continued medical therapy
- **Study design and setting:** Randomized, controlled trial of patients with ischemic heart disease treated at the Toronto Hospital in Toronto, Ontario
- **Intervention:** Four weeks after coronary angiography, patients viewed the IHD SDP, an interactive video program developed by the Foundation for Informed Medical Decision-making. The tool presents information about possible risks and benefits associated with bypass surgery, coronary angioplasty, and continued medical therapy, along with probability estimates of the associated risks and benefits.
- **Primary outcome:** Patient satisfaction with the decision-making process at the time of the treatment decision, as assessed via questionnaire.
- **Secondary outcome:** Patient knowledge at the time of the treatment decision, as assessed by true/false questions.

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Main Results

- 240 patients were enrolled; of these 187 completed the study (97 in the control group and 90 in the intervention group)
- Patients in both groups were reasonably satisfied with the decision-making process (71% for IHD SDP group vs. 70% for control group).
- Patients who used the IHD SDP achieved significantly higher knowledge scores than controls (P<0.001).
- At the time of treatment decision, patients in the intervention group were significantly less likely to choose revascularization over continued medical therapy than control patients (58% in IHD SDP group vs. 75% in control group). This difference persisted at six-month follow up.
- Patients who used the IHD SDP were significantly less likely to agree with the angiographer's recommendation for revascularization than were control patients.

Key Implications

- Patients who used the IHD SDP were reasonably satisfied with the decision-making process, although not more so than patients who received usual care.
- Patients who received the intervention were more significantly more knowledgeable, less likely to undergo revascularization, and more likely to disagree with a recommendation of revascularization.
- These findings suggest that decision aids can assist in the decision-making process by increasing patient knowledge and possibly by clarifying patient values and preferences, even when these differ from their physicians'.
- Additional research is needed to assess whether use of these tools improves health care value.

Previously known about the topic:

- The optimal treatment for ischemic heart disease is unclear in certain situations; thus the choice between revascularization and medical management must be guided by other factors, including patient preference.
- Research has shown that patients who use decision aids are better informed and more satisfied with the decision-making process.

Contribution of this study:

- Patients who used decision aids prior to choosing treatment for ischemic heart disease were reasonably satisfied with the decision-making process, although not more so than patients who received usual care.
- Use of decision aids increased patient knowledge and may help patients clarify their values and preferences for treatment.

Full citation:
Morgan MW, Deber RB, Llewellyn-Thomas HA, Gladstone P, Cusimano RJ, O'Rourke K, Tomlinson G, Detsky AS. Randomized, controlled trial of an interactive videodisc decision aid for patients with ischemic heart disease. J Gen Intern Med. 2000;15(10):685-93.

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