IS CORONARY ANGIOGRAPHY UNDERUSED IN AN INNER-CITY POPULATION?

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coronary symptoms were prospectively identified by using computer records at a municipal hospital center in the Bronx, New York. Patients were recruited weekly over 12 months starting in December 1998 and followed for 18 months. Patients were eligible for the study if they were $\geq 40$ years of age and undergoing evaluation for chest pain/pressure or angina equivalents. Patients were excluded if they had limited life expectancy (eg, AIDS, metastatic cancer, leukemia, lymphoma, severe refractory heart failure) at the time of enrollment; significant mental/cognitive disorders (eg, dementia, Alzheimer’s disease) that would preclude their ability to give consent for interviews; or a history of severe valvular heart disease, congenital heart disease, or previous coronary artery bypass graft. Patients were also excluded if they underwent stress testing solely to establish an exercise regimen or as part of a preoperative evaluation. We initially screened 513 patient records by using information contained in the computer system. Of these, 357 records appeared to meet inclusion criteria and were retrieved for full abstraction. Fewer than half ($n=165$) of the patient records that were abstracted met all eligibility criteria, and 153 agreed to participate.

BACKGROUND

Racial, ethnic, and sex disparities in the use of invasive cardiac procedures, such as coronary angiography and revascularization, have been well documented.\(^1\)\(^-\)\(^5\) However, most reports are based on retrospective chart reviews or secondary analyses of large administrative databases, which often contain limited clinical information. Few studies have examined whether differences exist in the appropriateness of such procedures by race or sex based on standardized clinical criteria or prospectively followed patients to determine clinical outcomes among those who did not receive an indicated procedure.\(^6\)\(^-\)\(^8\) The purpose of this study was to determine if referral to coronary angiography differed by either race/ethnicity or sex among patients with symptoms suggestive of coronary ischemia and, if so, whether differences were explained by standard clinical criteria for the procedure. We also wanted to determine if any adverse outcomes occurred among persons for whom angiography was judged necessary but who did not undergo the procedure within 18 months of presentation.

METHODS

Patient Population and Data Collection

Individuals undergoing evaluation in the general medical inpatient or outpatient services (eg, the outpatient clinic or stress testing laboratory) for
coronary symptoms were prospectively identified by using computer records at a municipal hospital center in the Bronx, New York. Patients were recruited weekly over 12 months starting in December 1998 and followed for 18 months. Patients were eligible for the study if they were $\geq 40$ years of age and undergoing evaluation for chest pain/pressure or angina equivalents. Patients were excluded if they had limited life expectancy (eg, AIDS, metastatic cancer, leukemia, lymphoma, severe refractory heart failure) at the time of enrollment; significant mental/cognitive disorders (eg, dementia, Alzheimer’s disease) that would preclude their ability to give consent for interviews; or a history of severe valvular heart disease, congenital heart disease, or previous coronary artery bypass graft. Patients were also excluded if they underwent stress testing solely to establish an exercise regimen or as part of a preoperative evaluation. We initially screened 513 patient records by using information contained in the computer system. Of these, 357 records appeared to meet inclusion criteria and were retrieved for full abstraction. Fewer than half ($n=165$) of the patient records that were abstracted met all eligibility criteria, and 153 agreed to participate.

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