Appropriateness of Coronary Artery Bypass Graft Surgery

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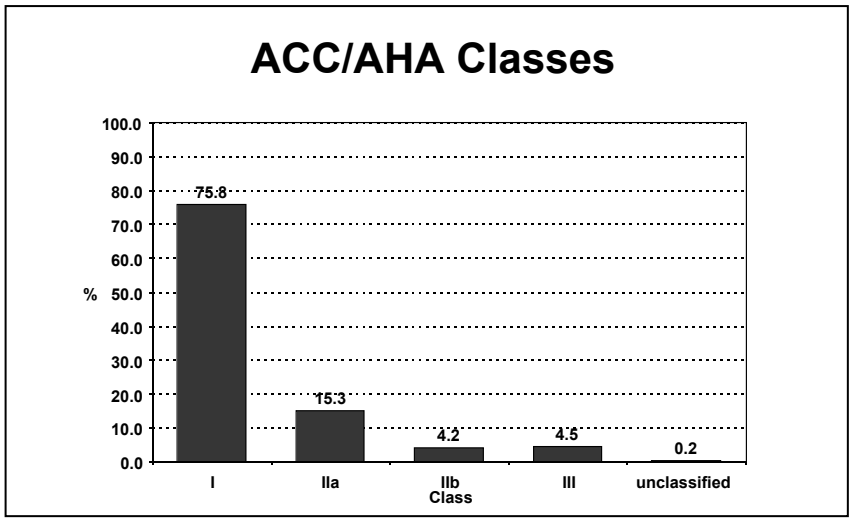
Introduction: Evidence based medicine m andates constant examination of the appropriateness of invasive procedures. In 1991 and 1999 the ACC/AHA published Guidelines for Coronary Bypass Graft Surgery. We assessed concordance between these guidelines and actual clinical practice in our region.

Methods: We evaluated 22,161 consecutive isolated CABG procedures from 8 medical centers between 1996-2001. We used existing regional registry data to categorize patients into 8 clinical subgroups (asymptomatic or mild angina, stable angina, unstable angina/non-Q wave MI, ST-segment elevation/Q-wave MI, poor left ventricular function, life threatening ventricular arrhythmias, failed PTCA, patients with previous CABG surgery). Detailed clinical criteria were then used to categorize procedures within these subgroups as follows: Class I (useful and effective); Class IIa (evidence favors usefulness); Class IIb (evidence less well established); Class III (not useful or effective).

Results: Among these 22,161 procedures we are able to classify 99.8%. The majority of procedures were Class I (**76**%). Class II procedures totaled **19**%. Of these **15**% were Class IIa and **4**% were Class IIb. The remaining **5**% were Class III procedures. Of the 996 Class III procedures the distribution by clinical subgroups was: poor left ventricular function (63%), failed PTCA (18%), stable angina (16%), ST-elevation/Q-wave MI (2%), and asymptomatic or mild angina (1%).



Conclusions: In this regional study we found that **95**% of procedures were either Class I or Class II. Actual clinical practice closely follows the recommendations of the ACC/AHA Guidelines for Coronary Bypass Graft Surgery.