Resistance to Use of Perioperative \( \beta \)-Blockers: A No-Man’s Land

Siddiqui et al.\(^1\) reported underutilization of perioperative \( \beta \)-blockers. We wish to confirm and extend their observation by demonstrating resistance to change.

We prospectively monitored the perioperative use of \( \beta \)-blockers, before and after an intervention among the medical staff, as a project of safety and quality at Hadassah University Hospital (a leading academic center in medical staff, as a project of safety and quality at Hadassah University Hospital, PO Box 12000, Jerusalem, Israel) following a recent recommendation\(^2\) by the Agency of Healthcare Research and Quality.

At baseline, over a period of 6 weeks, 602 patients underwent a noncardiac operation in general surgery, neurosurgery, urology, orthopedics, or gynecology. Of 75 patients who met criteria for \( \beta \)-blocker use, none received this treatment (18 had known coronary artery disease [CAD] and 57 had at least 2 CAD risk factors). In 43 patients receiving \( \beta \)-blockers before surgery, the treatment was maintained.

An intervention included presentations of current evidence and local use at several departmental meetings of surgery and anesthesiology. An institutional protocol for perioperative \( \beta \)-blocker use was developed in agreement with senior cardiologists, anesthesiologists, and surgeons and approved by department heads. In 2 departments, we attempted academic detailing by a visiting nurse who reminded physicians about the protocol and suggested use of \( \beta \)-blocker for patients meeting the criteria. After the intervention, there was no change at all. Over a period of 6 weeks, 475 patients underwent noncardiac operations, 72 patients met criteria for \( \beta \)-blocker use, and none received treatment (18 had known CAD and 54 had at least 2 CAD risk factors).

During the same period and using a similar intervention, we observed a significant increase in the use of low-molecular-weight heparin for postoperative thromboprophylaxis. We were surprised by the resistance to change with regard to the use of perioperative \( \beta \)-blockers: although the medical staff knew and generally accepted the recommendations, they did not get implemented. Only a few physicians might have been aware of an emerging controversy regarding the use of perioperative \( \beta \)-blockers.\(^3\)

In addition to the explanations suggested by Siddiqui et al.\(^1\), we suggest another reason for this inertia: the surgeon thinks this is a problem for cardiologists or internists (who do not see most of the patients) or for anesthesiologists (who see the patients too late). For this no-man’s land problem, we need perhaps a system solution, such as a computer-based reminder.

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An Alternative View of Current Evidence in Support of Perioperative \( \beta \)-Blockers

We read with interest the studies by Siddiqui et al.\(^1\) and Lindenauer et al.\(^2\) Each report has, as its raison d’être, the supposition that perioperative \( \beta \)-blockade is the standard of care for the prevention of postoperative cardiac complications. Furthermore, both studies presume that physicians who do not prescribe \( \beta \)-blockers are not practicing good perioperative medicine. We wish to express the contrarian view that the evidence supporting the recommendation for perioperative \( \beta \)-blockade is insufficient and that a vast amount of research is still required in the field of perioperative risk reduction.

Two meta-analyses have pooled the data from randomized controlled studies of perioperative \( \beta \)-blockade.\(^3\)\(^4\) Although both groups of reviewers found statistically significant reductions in myocardial infarction (MI), the pooled effect estimates were heavily weighted by 2 studies. One study was an interim analysis of an un-