removed. The third group—the placebo group—looked from the outside like the other two treatments (anesthesia, incisions, etc.); and the procedure took the same amount of time; but no instruments were inserted into the knee. In other words, this was simulated surgery.<sup>8</sup>

For two years following the surgeries, all three groups (which consisted of volunteers, as in any other placebo experiment) were tested for a lessening of their pain, and for the amount of time it took them to walk and climb stairs. How did they do? The groups that had the full surgery and the arthroscopic lavage were delighted, and said they would recommend the surgery to their families and friends. But strangely—and here was the bombshell—the placebo group also got relief from pain and improvements in walking—to the same extent, in fact, as those who had the actual operations. Reacting to this startling conclusion, Dr. Nelda Wray, one of the authors of the Moseley study, noted, "The fact that the effectiveness of arthroscopic lavage and debridement in patients with osteoarthritis of the knee is no greater than that of placebo surgery makes us question whether the \$1 billion spent on these procedures might be put to better use."

If you assume that a firestorm must have followed this report, you're right. When the study appeared on July 11, 2002, as the lead article in the *New England Journal of Medicine*, some doctors screamed foul and questioned the method and results of the study. In response, Dr. Moseley argued that his study had been carefully designed and carried out. "Surgeons . . . who routinely perform arthroscopy are undoubtedly embarrassed at the prospect that the placebo effect—not surgical skill—is responsible for patient improvement after the surgeries they perform. As you might imagine, these