would finally get a scientifically controlled surgical trial to see how effective the procedure really was.

To carry out this test, Dr. Cobb performed the traditional procedure on some of the patients, and placebo surgery on the others. The real surgery meant opening the patient up and tying up the internal mammary artery. In the placebo procedure, the surgeon merely cut into the patient's flesh with a scalpel, leaving two incisions. Nothing else was done.

The results were startling. Both the patients who did have their mammary arteries constricted and those who didn't reported immediate relief from their chest pain. In both groups, the relief lasted about three months—and then complaints about chest pain returned. Meanwhile, electrocardiograms showed no difference between those who had undergone the real operation and those who got the placebo operation. In other words, the traditional procedure seemed to provide some short-term relief—but so did the placebo. In the end, neither procedure provided significant long-term relief.

More recently a different medical procedure was submitted to a similar test, with surprisingly similar results. As early as 1993, J. B. Moseley, an orthopedic surgeon, had increasing doubts about the use of arthroscopic surgery for a particular arthritic affliction of the knee. Did the procedure really work? Recruiting 180 patients with osteoarthritis from the veterans' hospital in Houston, Texas, Dr. Moseley and his colleagues divided them into three groups.

One group got the standard treatment: anesthetic, three incisions, scopes inserted, cartilage removed, correction of soft-tissue problems, and 10 liters of saline washed through the knee. The second group got anesthesia, three incisions, scopes inserted, and 10 liters of saline, but no cartilage was