Microsurgery Successful in Vasectomy Reversals

By JANE E. BRODY

A University of California urologist has developed a microscopic surgical technique that he says has thus far proved completely effective in reversing a vasectomy, a means of male sterilization that is ordinarily regarded as permanent.

The doctor, Sherman J. Silber of San Francisco, said yesterday that he had operated on 24 men. The wives of the first 16 patients who underwent the procedure more than three months ago—the minimum time necessary for the sperm count to return to normal—have all become pregnant, Dr. Silber said.

With ordinary surgical techniques, only about one-quarter of the men who have a vasectomy reversed are able to impregnate their wives. At most, with surgery by the most experienced surgeons, the pregnancy rate following reversal of a vasectomy has been 40 per cent.

Dr. Silber emphasized, however, that his early success with reversal should not be taken as a reason to undergo vasectomy when a man is not absolutely certain he wants no more children.

“It must still be regarded as a permanent procedure,” he said.

Dr. Silber’s initial results will be described next week at a meeting of the American College of Surgeons in San Francisco, where he will demonstrate the technique on closed-circuit television.

Most doctors have attributed the lack of greater success in reversing vasectomy to the activity of antibodies in relation to sperm. Sixty per cent of men who undergo vasectomy develop these antibodies, which can clump the sperm and impair their ability to move. The antibodies can persist for years after a vasectomy is reversed and are thought to impair fertility.

But Dr. Silber said his results indicates that antibodies were not very important in hindering the success of reversal. Rather, he said in an interview yesterday success seems to depend primarily on precisely reuniting the vasa deferentia—the tiny tubes that carry sperm from the testicles to the urinary canal for ejaculation—without causing any constrictions. It is these tubes that are cut in a vasectomy to block the movement of sperm.

He said that ordinary surgery to reunite the tubes, which are only one-fiftieth to one-hundredth of an inch in diameter, is likely to result in constrictions even with the most careful surgery. But by operating under a microscope, which magnifies the tube 40 times, he said, he was able to reunite the tubes without producing a partial blockage.

Kidney Transplants

Dr. Silber said he had developed the microscopic technique while studying kidney transplants in rats. In transplanting kidneys from newborn rats to adult animals, he found he needed a microscopic technique to rejoin blood vessels that were less than one-hundredth of an inch wide.

The sutures he used are so slender that they are not visible to the unaided eye, and the surgical tools are honed to fine, perfect points under the microscope.

Dr. Silber, who is an assistant professor at the University of California and chairman of urology at the Veterans Administration Hospital in San Francisco, said it takes about three months of practice on rats to develop expertise with the technique.

Dr. Ira Lubell, executive director of the Association for Voluntary Sterilization, said that Dr. Silber’s success rate, if it continues to hold up, “is the highest reversal rate yet reported. “If it’s true, it will certainly make vasectomy a lot more acceptable.” Dr. Lubell said.

Since 1970, the association estimates, nearly four million American men have undergone vasectomy.

Dr. Lubell said that others have tried microsurgery to reunite the tubes, but with no better than a 40 per cent pregnancy rate following the surgery.

Another expert, Dr. Richard Amelar, a urologist affiliated with New York University Medical Center, said that since Dr. Silber did not test his patients for the presence of antibodies, it was remotely possible that all 16 successes were in men who did not have antibodies to begin with.

Nonetheless, Dr. Amelar remarked, “I think his findings are phenomenal and contrary to everyone else’s experience.”

Dr. Silber’s patients had undergone vasectomy between one year and 15 years before reversal was attempted. He said the minimum time for pregnancy to occur after reversal was four months and the maximum one year.