Fertility Rights

Being positive means never being papa, right? Wrong. Meet Larry and Carol Madeiros, the serodiverse couple next door, who put sperm washing on the PWA bill *of rites.*

May 1, 2001 By Stacie Stukin

Larry and Carol Madeiros of rural Northville, New York, met in 1985 waiting tables at a Marriott hotel in nearby Albany. Carol was dating her high school sweetheart, but Larry was persistent, and by 1989 they were hitched. They've wanted kids ever since. That's an OK dream for a young couple, right? Well, Larry has HIV and Carol doesn't, so it depends on who you ask.

The Madeiroses had explored adoption but worried that agencies would reject them over Larry's HIV status. Besides, Carol says, "We were having the time of our lives, and we really wanted a child who would be a part of each of us." But that just didn't sit right with some folks: A few doctors told them outright that HIV positive people shouldn't have kids. Others objected to the risk of Larry passing HIV to his wife -- and HIV and hemophilia to his kids. The couple put their dream on hold until 1996, when Larry started HAART. Still, fertility doctors slammed the door in their faces. Even with Larry's now-undetectable viral load, they said, the risk to Carol was too great. It didn't help that both the Centers for Disease Control and Prevention (CDC) and the American Society for Reproductive Medicine advise against doctors offering reproductive technology to serodiverse couples.

So the Madeiroses hit the phones and tracked down Augusto Semprini, MD, a physician in the Department of Obstetrics and Gynecology at the University of Milan Medical Center who had been assisting seromixed couples for several years in Italy. Using a common fertility procedure called "sperm washing," he separated out infected cells from the semen of positive men before performing insemination. Armed with a 1992 *Lancet* article by Semprini, the Madeiroses made the rounds again. One major fertility clinic in Florida agreed to take them on, but the couple arrived promptly at 7 a.m. to a cancelled appointment; lawyers had advised the doctors not to risk the liability. The doc who finally helped them out still won't go public about having performed the procedure.

On May 18, 1998, their daughter, Ashley, was born. Sixteen months ago, they welcomed their son, Taylor, into the world. "Of course I thought about the risks, but if you're going to do this, you can't dwell on the bad," Carol says. "I also knew if I got pregnant but seroconverted, there were drug protocols out there that could protect my baby." To the couple's delight, Carol and both kids remain HIV-free. "A boy and a girl," the proud papa says. "We could not have written the script any better."

But such happy endings are a long time in production. First, a wannabe dad has to lower his viral load with HAART. Then he gives a semen sample, which is spun in a centrifuge to separate out the sperm (which most researchers agree is invulnerable to HIV infection) from the seminal fluid, which may contain free-floating virus or HIV-infected white blood cells. The isolated sperm is then washed twice in a chemical solution to remove any remaining potentially infectious fluid and frozen until insemination. Some doctors take the extra precaution of testing each portion for HIV first; if even the seminal fluid tests positive, they toss the whole sample and send the father-to-be home for another try -- since viral shedding does fluctuate.

While Semprini uses a catheter to inject the washed sperm directly into the uterus (intrauterine insemination), the Madeiroses opted for in-vitro fertilization (IVF), which further reduces the risk of transmission: The woman is exposed to only a few fertilized eggs rather than millions of live sperm. With IVF, the mother-to-be has to not only take fertility drugs to stimulate egg production but undergo the painful process of having her eggs harvested and then, after lab fertilization, reimplanted in her uterus. Besides the hassle, this is all extremely expensive -- from $3,000 for a single sperm-washing and insemination up to $8,000 for each IVF attempt. Altogether, it took Carol a total of five inseminations and three IVFs to produce Ashley and Taylor, affordable only because the private health insurance she gets through her pharmaceutical industry job covered all the treatments without balking at Larry's HIV status.

The Madeiroses know the choice they've made is controversial, even among HIVers. While Rebecca Denison, an HIV positive parent and director of the Oakland-based women's AIDS organization WORLD, considers sperm washing an important harm-reduction tool, Bill Gallimore, a gay and HIV positive children's educator, has doubts. "Ever since I was young, I've wanted a family," he says. "Finding out about sperm washing, I actually dared to dream." But when recently approached by a friend to father her child, he declined. "Even with the best precautions," he says, "I'm scared that I would make someone seroconvert. The idea of doing that to someone you love is really daunting."

Many docs concur. "I take care of women," says Alice Stek, MD, director of perinatal services at the University of Southern California Maternal Child HIV Center. "Although the transmission risk is fairly low, especially if the man is on antiretrovirals, I won't have anything to do with exposing women to a potentially lethal infection." Stek encourages couples to consider the use of a sperm donor or adoption instead. "Of course, sperm washing is less risky than coitus," she says, "but I would encourage any woman who feels she's being coerced into this to re-evaluate her relationship." As Denison says, "The challenge is making sure there are two fully informed, consenting adults -- though that's hard, because the desire to have a baby with the person you love is not entirely rational."

Ann Kiessling, PhD, an expert on disease and reproduction, recently became a sperm-washing advocate. When she discovered that no Boston-area hospital would offer fertility treatments to serodiverse couples (they were wary of seroconversion lawsuits), she founded the Assisted Reproduction Foundation, set up a mobile lab that provided full fertility services to the serodiverse and parked it outside a Boston surgical clinic. She, too, worries about undetected infected cells even after sperm washing. "But sperm washing combined with IVF is safer than a lot of the risks

these couples are willing to take to conceive," she says.

In a society that is, at best, ambivalent about PWA sexuality, serodiscordant parenting remains a hard sell. Jack Moye, Jr., MD, a medical officer at the National Institute of Child Health and Human Development, says that in the face of a single documented pre-HAART case of a woman seroconverting, "couples may be on shaky ground in terms of safety." And though the Lambda Legal Defense and Education Fund, according to staff attorney Catherine Hanssens, opposes any criminal liability in favor of "intensive pre-insemination counseling and detailed consent forms," tissue-banking laws in several states simply prohibit health care providers from inseminating a woman with sperm from an HIV positive man.

New data may reform all that. In 1998, Barcelona's Simon Marina, MD, reported in *Fertility and Sterility* that of 101 serodiscordant inseminations he conducted, producing 37 babies, all the moms and kids came up virus free. As of early 1999, Milan's Semprini had attempted more than 2,000 inseminations with washed sperm on 550 women: 184 babies and not a single seroconversion. And a study by Mark Sauer, MD, director of the Division of Reproductive Endocrinology at Columbia University, shows equal promise: After treating 50 couples, every woman remains HIV negative and about half have had successful pregnancies. Sauer prefers a particular form of IVF, intracytoplasmic sperm injection, in which a single sperm is injected into a single egg. "We're only picking up a handful of sperm from the millions that are isolated," he says. "Even if you believe that HIV can piggyback onto sperm -- which I don't buy -- the risk with this procedure is very low in men with undetectable viral loads."

The Italian data is so impressive that the CDC has funded a follow-up study on Semprini's patients; once that is completed, says CDC spokesperson Terry Hammond, the agency "plans to hold an expert consultation to review the data and determine if an updated policy is warranted." Sauer would welcome the change. "We're trying to promote that people with HIV can have healthy, happy lives, so it's not fair to say they can't have children," he says. "These couples deserve not to be discriminated against, and they should have the same care as everyone else."

Since the birth of their daughter, the Madeiroses have been on a mission, publicly sharing their story with *Dateline*, *The Washington Post* and *The New York Times.* Through Larry's new group, Positudes, they have also helped dozens of couples manage the highs and lows of the difficult process. "We had this miracle when so many people said no way, no how," Larry says. "So helping other couples isn't a job -- it's a responsibility."
