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Frequently Asked Questions

Q: Who are the candidates for vasectomy reversal?

A: With a few exceptions, nearly all vasectomised men are candidates for reversal procedures, either a vas-vas (vasovasostomy, VV) or a vas-epididymis (epididymo-vasostomy, EV) connection may be performed. Couples with special female fertility issues, such as fallopian tube blockage, should consider in vitro fertilization (IVF) since the restoration of normal male fertility may not overcome the co-existing female factor.

Q: What are the factors which determine pregnancy rate following vasectomy reversal?

A: Four major factors are considered in advising individuals regarding the pregnancy rate following vasectomy reversal:

1. Obstructive interval or number of years since vasectomy: as reported by the authoritative study based on the results of 1,469 men (vasovasostomy Study Group 1991), the pregnancy rates are 76% for reversal performed within 3 years of vasectomy, 53% for 3 to 8 years, 44% for 9 to 14 years and 30% for 15 or more.
2. Age of the female partner: for those couples with the female partner 30 or younger, this is not likely to be an issue. In a study of 115 couples (Fuch), pregnancy rates were 49% with the female age at 31 to 35, 45% at age 36 to 40 and 20% at age 41 to 45. Delivery rates were proportionally lower in the older group, as you would expect. Since the success rate is inversely proportional to the passage of time, the consensus is to proceed with vasectomy reversal sooner rather than later when the decision is made.
3. The use of an operating microscope is recommended and is standard in our practice.
4. The surgeon: carefully choosing your physician simply makes sense. Dr. Gundian has been performing this procedure since 1990, following his urologic training at the Mayo Clinic in Minnesota. His CV is available on this website.

Q: How involved is the surgery and what's the recovery like?

A: For routine reversal or VV, two one-inch incisions are made high in the scrotum. The amount of dissection is limited, and you can almost equate the reversal with a "super-sized" vasectomy. The operative time is 2 to 3 hours. For more complex reversals or EV, the incisions are longer in order to deliver the testes onto the operative field. A fair amount of tissue swelling is expected postop. The time is 3 to 5 hours, since epididymal exploration may be time consuming. Recovery varies according to the procedure; routine VV is well tolerated with minimal to moderate narcotic requirement, and one may return to a desk job in 3 to 5 days. EV is taxing, one should be prepared to rest for 7 days or more.

Q: What is sperm aspiration?

A: Sperm aspiration, in conjunction with in vitro fertilization and sperm in IVF/ICSI, is an invaluable tool in the management of infertile couples. Aspiration is done under IV sedation with a butterfly needle to obtain sperm; however, IVF/ICSI is not. Aspirated sperm are few in number and immature in function; fertilization requires that these sperm be injected into each egg in the laboratory. Pregnancy is then established following successful fertilization and embryo transfer to the uterus. Direct insemination is not possible with these sperm.

Q: Reversal or IVF, and what's the bottom line?

A: Academic argument for either approach notwithstanding, one needs to compare the direct cost for each approach. To a significant degree, the medical specialist consulted, whether a urologist performing the reversal or the reproductive endocrinologist overseeing the IVF will influence the couple's decision. On average, an IVF attempt with sperm aspiration costs \$12,000 to \$15,000, with a pregnancy rate of 25% to 50%. In contrast, a reversal costs \$6,000 to \$8,000, with pregnancy rate at least that of an IVF.

Numerous cost-effectiveness studies have been performed to examine the difference between reversal and IVF. The average out-of-pocket cost per delivery following vasectomy reversal is \$15,000 to \$31,000, factoring into various prognostic factors and the procedure performed (VV or EV). In contrast, out-of-pocket cost for IVF, at a very reasonable 35% delivery rate per cycle, is at least \$35,000. This figure does not include the third party obstetric and perinatal expenses associated with multiple gestations. A Cornell study (Schlegel, 1997) placed the overall cost per delivery at \$25,475 following reversal vs. \$75,521 for IVF. It is fair to state that vasectomy reversal is at least as effective, if not more so in many couples, at half the cost.

One may argue that IVF obviates the need of a surgical procedure with the attendant risks. The fact that IVF is an intense and time-consuming process, lasting weeks, repeated office visits and in-home shot administrations, it then culminates in retrieval and subsequent embryo transfer. In contrast, reversal is straightforward, with minimal morbidity and short recovery. Furthermore, since patients are young and healthy, it has extremely low incidence of complications. In most couples, the decision is easy; typically, the man had a vasectomy years ago and is now married to a lady in her late 20s or early 30s with no fertility problems. Vasectomy reversal makes sense. On the other hand, if the vasectomy was performed 20-plus years ago and the wife is only 25 in whom IVF may achieve a 50% birth rate, then it is perfectly reasonable to consider IVF if one is willing to accept the higher cost.

Q: Nevertheless, we are really interested in IVF/ICSI and are considering several IVF centers. Where can we find out more about IVF and these centers?

A: By law, assisted reproductive outcome nationwide is tallied and reported each year. The annual report takes 2 to 3 years to comprise. Furthermore, each IVF center's results are also available on the internet on the CDC website.

Q: Will vasectomy reversal work, considering my wife is 38 years old?

A: Provided that no major obstacle exists in the female, vasectomy reversal continues to be the preferred approach. Fuch et. al. in 2001 reviewed the results in 115 men who underwent reversal 15 years or more after vasectomy and reported the pregnancy and delivery rate based on the partner's age. The results are as follow: pregnancy and delivery rate: < 25: 57 to 57%, 26 to 30: 58 to 46%, 31 to 35: 49 to 49%, 36 to 40: 45 -32%, 41-45: 20 to 13% and > 45: 0 to 0%.

I believe it is reasonable to suggest 30 to 40% pregnancy rate in couples with the female partner in her late 30s following reversal. My approach is this group is individually based. For example, if the vasectomy was within 10 years with a partner of proven fertility, reversal is favored. If the vasectomy was 15 years or more in whom EV will be needed which may be associated with delayed sperm appearance up to one year postop, IVF may be more expedient to take advantage of the female "window of opportunity" prior to her 40th birthday. All patients' wives or partners are advised to be screened by a gynecologist to ensure that they do not have an undiscovered female infertility problem that would make vasectomy reversal futile.

Q: Is it worthwhile to even consider a re-do? Does it ever work?

A: Repeat vasectomy reversal should be considered not only in those who demonstrated zero sperm count postop but also in those with low sperm count and low motility due to partial blockage of the system. The success rate is low compared with "virgin" reversal but it still very reasonable with 75% patency and 43% pregnancy rate (VVSG, 1991).

It is difficult to convince one to undergo yet another attempt at reversal, but let's repeat it as an alternative.

The caveat is that up to three-quarters of the re-dos require EV on at least one side (Hernandez, 1999), a procedure requiring microsurgical expertise. Chose your physician carefully for your re-do or, for that matter, your "virgin" reversal.

Q: Will my insurance pay for this procedure? If not, can you tell them the reason for reversal is because of chronic pain to justify coverage?

A: Insurance companies rarely pay for vasectomy reversal, and I have never heard of being reimbursed by an insurance carrier for this indication. As a contracted provider with the insurance company, we are obligated to submit claims truthfully without exception. We will not engage in any effort to secure insurance reimbursement using an alternative diagnosis for the performance of vasectomy reversal.