Vasectomy Reversal

Vasectomy can sometimes, but not always, be reversed. Reversal is a more complex operation with greater success rates if performed less than 10 years after the original surgery.

Peter Kolettis, MD discusses the certain criteria in which vasectomy reversal is possible and when to refer to the specialists at UAB Medicine.

Featured Speaker:

Peter Kolettis, MD

Peter Kolettis, MD is Professor of Urology at the University of Alabama at Birmingham. He joined the faculty in July of 1998 and has served as the Urology Residency Program Director since July 2003.

Learn more about Peter Kolettis, MD (https://providerdirectory.uabmedicine.org/provider/Peter+Kolettis/570146)

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Transcription:

Melanie Cole, MS (Host): UAB Medcast is an ongoing medical education podcast. The UAB division of continuing education designates that each episode of this enduring material is worth a maximum of .25 AMA PRA Category 1 credit. To collect credit, please visit uabmedicine.org/medcast and complete the episodes posttest.

Welcome. Our topic today is vasectomy reversal. My guest is Dr. Peter Kolettis. He is a professor in the department of urology at UAB Medicine. Dr. Kolettis, what is the prevalence of vasectomies in this country? What's the prevalence of men that are seeking reversal?

Peter Kolettis, MD (Guest): Well, vasectomy is one of the most common surgical procedures performed in the United States. It's estimated that 500,000 men have the procedure done each year. It is estimated that between 4% and 10% of men that have a vasectomy seek to have it reversed in the future.

Melanie: Why would a man seek a reversal?

Dr. Kolettis: Most of the time it's because the man is now in a new relationship. Most of the time it's second marriage.

Although, about 20% of the time, in my experience, it has been because the couple has for whatever reason changed their mind and desire to have more children.

Melanie: Doctor, what are some of the variables that may influence reversal success rates; and how important is the experience of the clinician in this decision?

Dr. Kolettis: The factors that determine success on the male side would be the time since the vasectomy, the way that the surgery is performed, and then what the fluid looks like during surgery. So, we examine the fluid under a microscope to look for sperm or parts of sperm, and also look at the gross appearance of the fluid. Then as far as technique, it's important to use microsurgery because the results of microsurgery are better. Most people that do these surgeries use microsurgery.

On the female side, any female factors could obviously effect chance for pregnancy. So, it's a combination of the male factors, which would determine the success of having sperm return into the semen. Then on the female side, any female factors. Those would be the factors that contribute to success.

Melanie: Speak about patient selection criteria and patient evaluation and what role that plays in order for reversal to be an option.

Dr. Kolettis: If a man is able to have surgery safely and have

anesthesia safely, then just about anyone would be a candidate for a vasectomy reversal if he chose to have it done. So, it's very rare that someone would not be a candidate for it. The main thing is that the patient desires to have his own biological children. If he does, the choices between doing a reversal or doing what's called sperm retrieval to obtain sperm to use for IVF—invitro fertilization or we refer to that as test tube baby. So those would be the factors to consider for men. Again, as long as he's a suitable surgical candidate—meaning he doesn't have so many significant medical problems that it's not safe for him to have surgery—then he would be a candidate.

It's important to consider any female factors that may be present. His partner could have fertility problems that would affect the chance for getting pregnant and also effect the chance for natural conception. This, then, could lead the couple to have the procedure to retrieve sperm and do IVF rather than have a vasectomy reversal done. The female partner's age is very important because that's related directly to fertility. We can't change that, but it's important to counsel couples on chance for success and how it could be impacted by female factors and female partner age. So that's an overview of how we would select couples for that. Mostly it's couple's choice.

Melanie: What about the usefulness of vasectomy reversal to alleviate post-vasectomy pain syndrome. Is that sometimes the reason a man would come to you?

Dr. Kolettis: It can be, but in my experience that's very rare that reversal ends up being the treatment for post-vasectomy pain because there are many other non-surgical options that can be done first. So that's very rare in my practice. I would presume that it's also rare in other specialist's practice because there are other ways to try to alleviate pain.

Melanie: Doctor, you mentioned microsurgery and the experience of the clinician. What are some of the factors that you would consider when choosing the type of vasectomy reversal to use on a particular patient?

Dr. Kolettis: Well, the factors to consider would be the time since the vasectomy and then the appearance of the fluid. If the appearance of the fluid from the end vas deferens is not favorable—meaning it's sick fluid and we don't see sperm or sperm parts—then one has to consider doing connection from the vas deferens to the epididymis rather than simply reconnecting the two ends of the vas deferens. So that's the main decision that's made during surgery.

Melanie: Is one preferable over the other?

Dr. Kolettis: Well, the connection of the epididymis is more complicated. What's preferred is what is the indicated procedure, which is determined by what the fluid looks like. So that's how we would decide which procedure to do. You can't predict ahead of time if someone will need the surgery to the epididymis. The risk of needing the surgery to the epididymis goes up as the time since the vasectomy increases.

Melanie: Is there a debate about the facts of antibodies on pregnancy rates after vasectomy reversal?

Dr. Kolettis: There is some debate about that. We know that vasectomy can cause anti-sperm antibodies. How that effects pregnancy rates after a vasectomy reversal is controversial because there are other explanations for someone not being able to establish a pregnancy. There are couples where anti-sperm antibodies are present and they're still able to get pregnant. Then finally, it's not possible to test for those ahead of time. In other words, prior to the surgery. The only type of testing that's useful is to actually test the sperm themselves. So, in a man that's had a vasectomy, there aren't any sperm to test. So, I would say that most people don't consider anti-sperm antibodies in the decision making. We know that the chance for success depends on the time since the vasectomy. The chance of having anti-sperm antibodies, one can't really predict. So, it's not really incorporated in the decision making, although it's possible that could be reason for someone not being able to have a pregnancy.

Melanie: In summary doctor, tell other physicians what you would like them to know about vasectomy reversal and when to refer to UAB Medicine. And any techniques or interoperative considerations that you think it's important that they understand.

Dr. Kolettis: First of all, I think that someone should be experienced in microsurgery to do the procedure. One should understand the decision making that is required during the procedure about whether to do the surgery to connect the vas deferens to the epididymis or not. One can have some idea of the probability of that based on the time since the vasectomy, but it is not possible to predict that with certainty ahead of time.

Also, when a couple is better served by sperm retrieval and IVF rather than a vasectomy reversal. You can do a vasectomy reversal for any time since the vasectomy. The longer the time interval since the vasectomy, the lower chance for success. I tend to advise where the vasectomy's been 15 years or longer that their chance for getting pregnant is better doing IVF. That being said, a couple can choose to do whichever they are most comfortable with. Ultimately, it is their decision.

I think having someone comfortable with a microscope and all of the special instruments that are required to do a vasectomy reversal is important. Most people that do vasectomy reversals, I would expect, would be comfortable with that. Doing any procedure to retrieve sperm requires a specialized team that would be a urologist that does fertility surgery and then also the reproductive endocrinologist or the gynecology fertility specialist. So that's how I would approach the couple that desires treatment in this situation.

Melanie: Thank you so much Dr. Kolettis for being with us today. A community physician can refer a patient to UAB

Medicine by calling the MIST line at 1-800-UAB-MIST. That's 1-800-822-6478. You're listening to UAB Medcast. For more information on resources available at UAB Medicine, you can go to uabmedicine.org/physician. That's uabmedicine.org/physician. This is Melanie Cole. Thanks so much for listening.