VASECTOMY

Vasectomy is a common minor surgical procedure that can provide you with permanent sterility. It is performed under a local anesthetic. Doctors believe that vasectomy is a safe, and relatively simple method of permanent birth control. An article has appeared on the internet which suggests that this procedure is associated with an increased risk of prostate cancer. This research is flawed, and the results are considered by most experts to be invalid. If you would like more information on this article, please ask me about this when we meet in the office. While vasectomy is considered a form of permanent birth control, it is also possible to have your vasectomy reversed. Reversals are performed by urologists under a general anesthetic and are not covered by Alberta Health Care (approximate cost \$7000.00 - \$10,000.00). The fertility rate after a successful reversal is about 40%. Therefore, if you are not 100% sure of your decision to not have any more children, please choose another form of birth control. You can also consider "banking" some sperm (I do not know what this costs).

THE PROCEDURE

During this procedure, which is performed using a local anesthetic, the tube that carries sperm from the testicles through the prostate (the Vas Deferens) is cut and then closed. Permanent closure is achieved using a combination of dissolving stitches and electrocautery. Since only the "Vas" is cut there is very little change to the ejaculate (the fluid) because the prostate produces most of this fluid. You will not notice any change to the look, feel or color of the fluid (ejaculate) produced at orgasm; however, some men do notice a slight reduction in the volume of fluid that is ejaculated after a vasectomy. Sometimes some blood is present in the fluid for the first one or two ejaculations after the procedure. This is nothing to worry about unless it persists. If it does, you need to let me know.

Prior to coming to the hospital please shave the front part of your scrotum (the part just under your penis). The simplest way to do this is to use a blade and shaving cream. Hair clippers don't work very well, and hair removal creams may leave you with an uncomfortable rash. I perform this procedure at the Foothills Hospital (NOT the Rockyview). The location of the operating room is in the Minor Surgery Clinic on the ground floor of the McCaig Tower. Do not use the main entrance of the hospital or the Emergency Room entrance. From 29 St NW, turn at the set of lights closer to 16 Ave NW, onto Hospital Drive NW (where the new Cancer Hospital is). Follow Hospital Drive until you see parking Lot #10. Park there. Across the street you will see a glass building - The McCaig Tower. You can enter either through the underground parkade or outside via the main doors. You will be pre-admitted, so you do not need to check in at the admission desk; go directly to the Minor Surgery Clinic on the ground floor. Tell the receptionist that you are there to have a vasectomy performed by Dr. Babins. They will show you where to wait for the nurse who will escort you into the operating room. After signing a consent form you will be asked to remove your clothes from the waist down and lay on the bed; you will be given a nice warm blanket to cover yourself with. The nurse will then come back into the theater to finish the setup.

When I arrive, I will ensure that you have shaved yourself appropriately and, if not, will give you a minimal shave; having some residual hair can make the procedure uncomfortable (if it is accidentally pulled). I then cleanse the scrotum with a warm disinfectant and proceed to locate the Vas through the skin of the scrotum using my fingers. The skin and "vas" are then "frozen" by injecting local anesthetic into the skin and Vas. This is often associated with an uncomfortable pressure sensation in the groin that settles after approximately 10 - 15 seconds. The "freezing" should last about 30-60 minutes. Once frozen, the Vas is clamped through the skin and a 1/2 cm incision is made over the numb area. The Vas is brought to the surface and a small segment is cut out. The free ends are clamped, cauterized, tied with a dissolving stitch, and then folded back and stitched again, to optimize success. The free ends are then tucked back into the scrotum and the whole procedure (including the freezing) is repeated on the other side (there are two tubes because there are two testicles). The second tube is reached through the same midline incision (a second incision is only rarely required). After the second side is completed, I place some Polysporin and gauze over the wound, to protect it and keep it clean. You can then drive yourself home, provided you have not taken the Valium tablet. The whole procedure takes 20- 30 min.

A prescription for a Valium tablet will be included with the other prescriptions that will be provided. It is optional to take the Valium tablet – you can take it if you are nervous or anxious about the procedure. It works by relaxing both you and the muscles that control the descent of your testicles. You should take the Valium at the same time as the antibiotic, that morning, 1 - 2 hours before your procedure (if you decide to take it). If you do take the Valium tablet you must not operate a motor vehicle that day. You will therefore need to organize a ride for yourself, both to and from the hospital. Also, you should not drink any alcohol the day of the procedure (Valium and alcohol do not mix very well – the combination can affect your breathing when you are sleeping). Additionally, some men who take Valium and then the painkillers experience lightheadedness, so fainting is possible. If you do use the Valium and then require the painkillers after the procedure, be very careful when you get up. The light-headedness usually resolves after 36 hours.

If you usually wear boxer shorts, consider bringing a jock strap (without the cup) to wear home and for the next few days. If you usually wear jockey shorts you can continue to wear these. The extra support can help reduce the pain you may experience once the freezing wears off. Tight underwear usually feels better.

RISKS

The major risks of this procedure include **bleeding**, **infection**, **sperm granuloma** and **chronic pain**.

To prevent bleeding: I do my best to ensure that excessive bleeding is controlled before the procedure is over. Some post-operative oozing is normal and can hasten wound healing. To keep this to a minimum, and to prevent significant swelling from occurring, it is your responsibility to:

- Avoid aspirin and drugs containing ASA (like anti-inflammatory medications Advil, Motrin. Aleve, Ibuprofen) for 2 weeks prior to the vasectomy
- Go home and **REST** after the procedure and for the weekend yes, be a couch potato for the weekend!
- Ice the scrotum (a bag of frozen peas is a good choice) for 20 minutes every hour (while awake) for the first 2 days; the ice pack may be placed directly on the scrotal skin, or on top of a thin towel if you prefer.
- Try to avoid heavy lifting until it doesn't hurt to lift
- Avoid sports for 7 10 days
- Intercourse is not recommended for the first few days

To prevent infection:

- I perform this procedure using sterile technique
- The procedure is performed in a clean, outpatient operating room
- A prescription for antibiotics will be provided. These must be started the night before the procedure and be taken twice a day, morning, and evening, until finished (a total of 6 pills over 3 days).
- The scrotal incision is not closed with stitches but left open to heal on its own (usually 7-10 days), so you should not swim, enter a hot tub or bathe until the wound has closed. Showering is permitted the day following the procedure. If the wound has not closed after 2 weeks, please call, and inform me of this. This can be caused by contraction of the muscle within the scrotum after it is cut but can also be the result of a superficial infection that is treated easily with a topical antibiotic cream that I would prescribe for you.
- there have been rare cases where necrotizing fasciitis (flesh eating disease) occurs after vasectomy. This can occur after any surgical procedure or skin infection, but this has never occurred to any of my patients.

To prevent sperm granuloma:

- Sperm granuloma <u>may</u> form if there is leakage of sperm out of the vas after the procedure is completed. This problem can present weeks or months later as a lump beside the testicle that may or may not be painful. Sperm granuloma formation is prevented by adequate closure of the vas. I ensure adequate closure of the vas using 3 different techniques during your vasectomy (see above). Only 2 of my patients have developed a sperm granuloma – neither of these were painful so further treatment was not required.

PAIN

To treat post-operative pain:

- Ice and rest are the treatments of choice

- Rest as much as you can for the first 48 hrs
- A prescription for Tramacet (a synthetic narcotic) will be provided to you in case you need it. If you have some pain but Tramacet feels too strong (or you don't like how it makes you feel) you can take 2 tabs of Aleve every 8-12 hours
 - Listen to your body!! Increase your level of activity only when you feel like you can without pain.
 - It is normal to have some post-operative pain for the first day or 2, and you will probably notice some residual, usually mild, pain that resolves gradually over the 2 weeks following your procedure

To prevent the development of chronic pain:

- Rest as much as you can for the first 2-3 days
- Apply an ice pack regularly for the first 2 days (as above)
- Allow your body to heal before resuming your usual sexual and recreational activities (remember that people heal at different rates)
- If your pain does not improve after 2 weeks, or if begins to resolve but then increases again, please call the me as you may be developing an infection. Alternatively, some people have an inflammatory-type reaction to the dissolving stitches. This can cause swelling and pain in the vas or epididymis. Treatment with another antibiotic and/or an anti-inflammatory may be required; both would be taken twice a day for 10 days.
- Despite good technique and proper, diligent aftercare, chronic pain can still develop. Fortunately, this is uncommon; the literature quotes rates low as 1 in 2000 to as often as 10% after vasectomy. To date none of my patients have developed a chronic pain syndrome (as far as I am aware). Most men are back to normal within 2-3 weeks after the procedure.

If you have any concerns after the procedure you are encouraged to call me on my cell (403-978-5771). Please call my office (403-251-9535) to book a follow up appointment, once 30 ejaculations have been completed, to have a sperm check done. This is the only way to ensure that the procedure was successful. Another method of birth control must be used until a sperm check has documented the absence of live sperm in the ejaculate. It is not unusual for a second sperm check to be required; even after 30 ejaculations there can still be some residual dead sperm residing in the tubes – this is nothing to worry about, does not imply fertility and does not suggest that the procedure failed. If you have 2 tests that show a minimal number of dead sperm this is considered a successful procedure. Further testing is not required but feel free to be tested yearly if you prefer.

This procedure is generally very straightforward; however, on rare occasions a man has 2 testicles but only 1 vas tube. The literature suggests that this occurs in 1 out of 5000 men; in over 30 years of performing this procedure I have seen this only 3 times. If you are one of these men the procedure will still be successful, but it will take a bit longer to complete because I spend more time searching for a second tube before I conclude that

there isn't one. I am happy to examine you in the office today to confirm that you have 2 tubes if you would like.

Additionally, even after 30 ejaculations, there can still be live sperm in your ejaculate. The most common cause of this is a 3rd vas tube. This extra vas is smaller than normal and is difficult to feel until the other vas tubes have been operated on. The literature suggests that this occurs in 1 in 2000 men. Another reason for persistent live sperm is that sometimes, despite the measures that I take to ensure closure of the tubes, the ends can re-attach during the healing process. If you still have live sperm after 30 ejaculations, then I will follow up with you in the office to examine you to see if you have a tube that has not be operated on, or if the tubes have re-attached. In either case, I can take you back to the operating room to operate again, for the vasectomy to be successful. Of course, if you prefer, I can also refer you to a Urologist for the repeat procedure.

If you have any questions after reading through this information, please discuss them with the me.

Please note that I am a Clinical Associate Professor in the Department of Family Medicine at The University of Calgary. As such I almost always have final year Family Medicine Residents present during your procedure. Residents act only as assistants; I will always be the one performing the procedure.

My goal is to make this procedure effective and as comfortable as possible, with the least amount of disruption to your usual routine.

Thank you.

Dr. Eric M. Babins M.Sc., M.D., F.C.F.P., Dip. Sport Med. Clinical Associate Professor

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