

Vasectomy

Q.1. Are there any medical restrictions by client's age, number of living children or required waiting period for a man to undergo vasectomy?

Recommendations	Rationale
<p>a) Age or number of living children?</p> <p>No. In terms of safety, there are no age or number of living children medical restrictions for a man to undergo sterilization, but both must be considered during the counseling process to minimize the potential for regret.</p> <p>While the client's wishes should be paramount, he should understand that young age is a risk factor for regret.</p> <p>b) Waiting period?</p> <p>No. If a man has been counseled and has chosen a vasectomy, no waiting period should be required. However, it is often beneficial for the man to have time to think about his decision.</p> <p>However, the incidence of regret, even with young age at time of vasectomy, remains low. Counseling is important to minimize the potential for regret.</p>	<p>a-b) Age and number of living children are not medical reasons to restrict access to vasectomy according to World Health Organization Medical Eligibility Criteria. However, age and number of living children are important considerations for the counseling process. Clarke and Gregson found that men who requested vasectomy reversal were younger at the time of sterilization than controls.</p> <ol style="list-style-type: none">1) World Health Organization. Improving access to quality care in family planning: medical eligibility criteria for contraceptive use. Geneva: WHO, 1996.2) Clarke L, Gregson S. Who has a vasectomy reversal? <i>Journal of Biosocial Science</i> 1986;18:253-69. <p>Other factors that have been associated with vasectomy regret are remarriage or a change in partner, death of one or more children after the procedure, improvement in financial status, and more rarely, psychological problems with infertility or other physical problems. However, vasectomy has not been shown to physically cause adverse health effects (see Question 6).</p> <ol style="list-style-type: none">1) Male sterilization. <i>Population Reports</i> 1983;Series D(4):61-100.

Q.2. Is a wife's consent necessary before a man undergoes vasectomy?

Recommendations	Rationale
<p>No. A wife's consent should not be mandatory for a man to have a vasectomy. However, the man may wish to discuss the decision with his wife and family.</p>	<p>There are no studies on male regret based on the influence of the wife's consent on the decision for a vasectomy. In general, the literature supports the finding that couples that reach a decision together are more satisfied with their decision.</p> <ol style="list-style-type: none"><li data-bbox="824 615 1398 663">1) Boring CC, RoCHAT RW, Becerra J. Sterilization regret among Puerto Rican women. <i>Fertility and Sterility</i> 1988;49:973-81.<li data-bbox="824 665 1398 764">2) Shain RN, Miller WB, Holden AEC. Married women's dissatisfaction with tubal sterilization and vasectomy at first-year follow-up: effects of perceived spousal dominance. <i>Fertility and Sterility</i> 1986;45:808-19.

Q.3. Who can provide vasectomies?

Recommendations	Rationale
<p>Vasectomies can be provided by any health professional who has been properly trained to perform a vasectomy. Properly trained doctors, medical officers, nurses, nurse midwives, and other medical personnel with surgical experience can successfully perform vasectomies.</p>	<p>Various types of doctors, including general medical practitioners, general surgeons, other specialists (such as obstetrician-gynecologists) and paramedical professionals can receive training to perform vasectomy.</p> <ol style="list-style-type: none"><li data-bbox="824 520 1393 594">1) AVSC International. No-scalpel vasectomy: a training course for vasectomy providers and assistants. New York: AVSC International, 1997. In press.

Q.4. Are back-up contraceptive methods necessary after a vasectomy?

Recommendations	Rationale
<p>Yes. Although a man may have intercourse two or three days after the procedure if it is comfortable, a vasectomy is not immediately effective. The recommendations are for back-up methods to be used for 12 weeks following vasectomy or at least 20 ejaculations. Where programmatically feasible, a semen analysis should be performed at that time to check that the semen no longer contains sperm.</p> <p>It is important to recognize that a vasectomized man may still be at risk of acquiring or transmitting STDs and may need to use a back-up method (e.g., condoms) to protect himself and his partner(s).</p>	<p>It may take several months for the vas to clear the sperm contained in it at the time of vasectomy. This time varies from man to man. Therefore a back-up method for pregnancy prevention (e.g., condoms, Depo Provera® for partner) will need to be used for at least 12 weeks or 20 ejaculations.</p> <p>1) Brownlee H, Tibbels C. Vasectomy. <i>Journal of Family Practice</i> 1983;16(2):279-84.</p>

Q.5. What is the appropriate follow-up schedule following a vasectomy?

Recommendations	Rationale
<p>One follow-up visit within 7 to 14 days following a vasectomy is recommended to check incision sites, remove any sutures, and look for signs of complications. If feasible, a semen analysis can be performed after 20 ejaculations or 12 weeks to verify that azoospermia has been achieved.</p> <p>The client should be encouraged to return promptly if he has any problems (e.g., bleeding, swelling, fever, pain) or at any time he has questions or concerns.</p>	<p>The follow-up examination should take place between 7 and 14 days after surgery. Clients should receive counseling for warning signs and reasons to return for follow-up.</p>

Q.6. Does vasectomy cause adverse long-term health effects?

Recommendations	Rationale
<p>a) No, based on the weight of available evidence. Studies have not been conclusive as to a possible increased risk of prostate cancer. Although several studies found no association, two studies found a slight increase in risk.</p> <p>A large study also found no association between vasectomy and other health effects including cardiovascular disease.</p>	<p>a) Based on biological and epidemiological evidence, it is unlikely that vasectomy causes prostate cancer or any other long-term health effects such as cardiovascular disease.</p> <p>A recent study and two earlier studies also examined the association between vasectomy and prostate cancer. Zhu et al. used a population-based case-control design in a population where vasectomy was common. No association was found. Massey et al. and Sidney et al. both used a cohort study design. The former used a retrospective cohort of 10,590 vasectomized men while the later used a prospective cohort with a mean follow-up period of 6.8 years among 5119 vasectomized men. Neither study found an association between prostate cancer and vasectomy. Giovannucci et al. found odds ratios of 1.56 and 1.66, respectively, in two separate cohort studies. However, the biological explanation for the association has not been accepted by experts as likely.</p> <ol style="list-style-type: none"> 1) Healy B. From the National Institutes of Health: does vasectomy cause prostate cancer? <i>Journal of the American Medical Association</i> 1993;269:2620. 2) Zhu K, Stanford JL, Daling JR, McKnight B, Stergachis, Brawer MK, Weiss NS. Vasectomy and prostate cancer: a case-control study in a health maintenance organization. <i>American Journal of Epidemiology</i> 1996;144:717-22. 3) Massey FJ Jr., Bernstein GS, O'Fallon WM, Schuman LM, Coulson AH, Crozier R, et al. Vasectomy and health: results from a large cohort study. <i>Journal of the American Medical Association</i> 1984;252:1023-9. 4) Sidney S, Quesenberry CP, Sadler MC, Guess HA, Lydick EG, Cattolica EV. Vasectomy and the risk of prostate cancer in a cohort of multiphasic health-checkup examinees: second report. <i>Cancer Causes and Control</i> 1991;2:113-6. 5) Giovannucci E, Tosteson TD, Speizer FE, Ascherio A, Vessey MP, Colditz GA. A retrospective cohort study of vasectomy and prostate cancer in US men. <i>Journal of the American Medical Association</i> 1993;269:878-82. 6) Giovannucci E, Ascherio A, Rimm EB, Colditz GA, Stampfer MJ, Willett WC. A prospective cohort study of vasectomy and prostate cancer in US men. <i>Journal of the American Medical Association</i> 1993;269:873-7.

Recommendations

Rationale

b) Vasectomy does not affect normal sexual function. After a vasectomy, the man's body continues to produce male hormones which help the man to have erections, sex drive/feeling, and ejaculation. A man may even feel his sex drive is increased because he no longer worries about getting his partner pregnant.

b) Vasectomy only involves the occlusion of two small ducts, not the removal of any glands or organs. Therefore, it does not interfere with the functions of the testes- testosterone production and spermatogenesis.

1) Dias P. The long-term effects of vasectomy on sexual behaviour. *Acta Psychiatrica Scandinavia* 1983;67(5):333-8.

Q.7. Should a vasectomy be considered permanent?

Recommendations	Rationale
<p>Yes. Although there are procedures to reverse a vasectomy, the operation is very complex and expensive and the success rate depends on several factors, such as, type of reversal procedure, the physician's experience with the reversal procedure, time since the vasectomy was performed, the client's sperm quality and quantity, the anatomical effects of the original vasectomy, the presence of sperm antibodies, and the client's partner's fertility.</p> <p>Although reports have found sperm in the ejaculate in more than 67% of the men who had undergone vasectomy reversal, the percent of successes, as measured by pregnancies among their partners, ranged from 16 to 85 percent, with over half of the studies reporting that less than 50% of the wives achieved an intrauterine pregnancy.</p>	<p>A vasectomy reversal is an extremely complex operation that should be performed by highly trained and experienced surgeons. Microsurgical techniques require approximately 40 hours of intensive training in addition to frequent practice before a surgeon is proficient. Vasectomy reversal may be performed using micro- or macrosurgical techniques, each with its own advantages and disadvantages.</p> <p>Belker et al. and Fox found that the fertility rate after the vasectomy reversal decreased as the time between the reversal and the original vasectomy increased. The fertility rate can also be affected by postoperative scarring of the lumen, a lack of sperm in the ejaculate, and possibly the presence of sperm antibodies.</p> <ol style="list-style-type: none">1) Male Sterilization. Population Reports 1983;Series D(4):61-100.2) Ross J, Hong S, Huber D. Voluntary sterilization: an international fact book. New York : AVSC, 1985.3) Marmar J. The status of vasectomy reversals. International Journal of Fertility 1991;36(6):352-7.4) Belker A, Thomas A, Fuchs E, Konnak J, Sharlip I. Results of 1,469 microsurgical vasectomy reversals by the vasovasotomy study group. Journal of Urology 1991;145:505-11.5) Fox M. Vasectomy reversal - microsurgery for best results. British Journal of Urology 1994;73:449-53.

Classification of Selected Procedures for Vasectomy

Procedure	Class	Rationale
Genital examination	A	Required to rule out scrotal pathology.
Blood pressure	C	Blood pressure not related to safe use of vasectomy ¹ .
Sexually transmitted disease (STD) screening by lab tests (for asymptomatic persons)	C	There are no required lab exams for vasectomy in asymptomatic persons ¹ .
Routine, mandatory lab tests (e.g., cholesterol, glucose, liver function tests)	D	There are no required lab exams for vasectomy.
Proper infection prevention procedures	A	Proper infection prevention procedures are important to minimize the risk of infection to clients and providers.
Specific counseling points for male sterilization: <ul style="list-style-type: none"> ● efficacy ● use of a back-up method (See Question 4) ● irreversibility of method ● common side effects ● signs and symptoms for which to see a health provider ● STD protection (when/as appropriate) ● Post-operation counseling 	A	<ul style="list-style-type: none"> ● Proper counseling is important to ensure informed consent prior to having a sterilization operation. ● Proper counseling may also minimize future regret. ● Vasectomy should be considered a permanent contraceptive method.

KEY:

Class A = essential and mandatory or otherwise important in all circumstances, for safe and effective use of the contraceptive method

Class B = medically/epidemiologically rational in some circumstances to optimize the safe and effective use of the contraceptive method, but may not be appropriate for all clients in all settings

Class C = may be appropriate for good preventive health care, but not materially related to safe and effective use of the contraceptive method

Class D = not materially related to either good routine preventive health care or to the safe and effective use of the contraceptive method

Citations for Procedures Table:

1) World Health Organization. Improving access to quality care in family planning: medical eligibility criteria for contraceptive use. Geneva: WHO, 1996.