

Copper-Bearing Intrauterine Devices (IUDs)

Q.1. When can an intrauterine device (IUD) be inserted (interval)?

| Recommendations | Rationales |
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| <p>a) The IUD may be inserted at anytime during the menstrual cycle, at the user's convenience, when you can be reasonably sure the woman is not pregnant.</p> <p>(See Q.2. for postpartum insertion and Q.3. for post-abortion insertion).</p> <p>The IUD is effective immediately.</p> | <p>a) The IUD prevents pregnancy if inserted before implantation.</p> <p>1) Tatum HJ, Connell EB. A decade of intrauterine contraception: 1976 to 1986. <i>Fertility and Sterility</i> 1986;46(2):173-192.</p> |

Q.2. When can an intrauterine device (IUD) be inserted postpartum?

| Recommendations | Rationales |
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| <p>An IUD may be inserted:</p> <ul style="list-style-type: none"> a) Immediately post-placental, or during or immediately after a Cesarean-section (special training required). b) Prior to hospital discharge (up to 48 hours after delivery) (special training required). c) As early as 4 to 6 weeks postpartum, to accommodate women who come to the clinic for routine postpartum care and who request an IUD. Copper T IUDs may be safely inserted at this time. For other types of IUDs, it may be prudent to wait until 6 weeks postpartum. | <ul style="list-style-type: none"> a-b) With the appropriate technique, IUDs inserted immediately after placental delivery or Cesarean section can be safe and effective. Expulsion rates for postpartum insertion vary greatly depending on both the IUD type and provider's technique. Current information indicates that the expulsion rates may be higher from 10 minutes to 48 hours after delivery than in the first 10 minute period. To minimize risk of expulsion, only properly trained providers (according to relevant national or institutional standards) should insert IUDs postpartum. Use of an inserter for IUD placement tends to reduce expulsion risk. Clients should be counseled that expulsion rates are higher postpartum than for interval insertion and should be carefully trained to detect expulsions. c) A Copper T may be safely inserted at 4 or more weeks postpartum. The withdrawal technique for Copper T insertion presumably helps minimize perforations when inserting IUDs at the routine 4 or 6 week postpartum visit. Other IUDs that have a different profile or a push insertion technique might have different perforation rates. Given the relative lack of information on other IUDs at 4 to 6 weeks postpartum, it is prudent to wait until 6 weeks for the insertion of IUDs other than Copper Ts. <ol style="list-style-type: none"> 1) Chi I, Farr G. Postpartum IUD contraception – a review of an international experience. <i>Advances in Contraception</i> 1989;5:127-146. 2) O'Hanley K, Huber D. Postpartum IUDs: Keys for success. <i>Contraception</i> 1992;45:351-361. 3) Mishell DR, Roy S. Copper intrauterine contraceptive device event rates following insertion 4 to 8 weeks postpartum. <i>American Journal of Obstetrics and Gynecology</i> 1982;143(1):29-33. |

Recommendations

Rationales

d) In breastfeeding women.

d) It has been shown that IUDs can be safely used in breastfeeding women.

- 1) Farr G, Rivera R. Interactions between intrauterine contraceptive devices use and breastfeeding status at time of intrauterine contraceptive device insertion: Analysis of Tcu-380A acceptors in developing countries. *Advances in Contraception* 1992;167(1):144-151.

Q.3. How long should a client wait after a Cesarean section before having an intrauterine device (IUD) inserted?

| Recommendations | Rationale |
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| a) A client may have an IUD placed at the fundus during a Cesarean section prior to closure of the uterus, unless there are signs of infection. | a) Immediate insertions during Cesarean sections by a properly trained provider have a lower expulsion rate than for vaginal insertions immediately (within 10 minutes) after delivery. Studies also found that women with IUDs inserted at the time of Cesarean section had longer continuation rates. 1) Zhou S, Chi I. Immediate post-partum IUD insertions in a Chinese hospital – a two year follow-up. <i>International Journal of Gynecology and Obstetrics</i> 1991;35:157-64. 2) Xu J, Connell C, Chi I. Immediate postplacental insertion of the intrauterine device: a review of Chinese and the world's experiences. <i>Advances in Contraception</i> 1992;10:71-82. |
| b) If an IUD is not inserted at the time of the Cesarean section, it is recommended that the IUD be inserted no earlier than six weeks after the Cesarean section. | b) Delayed postpartum insertions should take place no earlier than six weeks after Cesarean section because of the risk of uterine perforation. Clients need careful assessment for presence of infection before insertion even at this time. 1) McIntosh N, Kinzie B, Blouse A, editors. <i>IUD guidelines for family planning service programs</i> . 2nd ed. Baltimore: JHPIEGO, 1993. |

Q.4. Can intrauterine devices (IUDs) be safely inserted by appropriately trained nurses and midwives after a client has had a Cesarean section?

| Recommendations | Rationale |
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| Yes. IUDs can be safely inserted after Cesarean sections by nurses and midwives who are appropriately trained according to relevant national or institutional standards. | <p>Nurses or midwives have been shown to have equal or superior competence in IUD insertion when compared to doctors.</p> <p>1) Eren V, Ramos R, Gray RH. Physicians vs. auxiliary nurse-midwives as providers of IUD services: a study in Turkey and the Philippines. <i>Studies in Family Planning</i> 1983;14:43-7.</p> <p>Training in proper insertion is the major factor for all providers in lowering the risk of uterine perforation. Proper insertion may also lower the risk of expulsion.</p> |

Q.5. Can an intrauterine device (IUD) be inserted immediately post-abortion?

| Recommendations | Rationales |
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| <p>a) Yes, the IUD may be inserted immediately post-abortion (spontaneous or induced) if the uterus is not infected, or during the first seven days post-abortion, (or anytime you can be reasonably sure the woman is not pregnant).</p> | <p>a) With appropriate technique, IUDs can be safely inserted post-abortion (spontaneous or induced). Expulsion rates vary greatly depending on both the IUD type and provider. To minimize risk of expulsion, only providers with proper training (according to relevant national or institutional standards) and experience should insert IUDs. Clients should be carefully trained to detect expulsions.</p> <p>Fertility returns almost immediately post-abortion (spontaneous, or induced): within 2 weeks for first trimester abortion and within 4 weeks for second trimester abortion. Within 6 weeks of abortion, 75% of women have ovulated.</p> <p>1) Lähteenmaki P, Ylöstalo P, Sipinen S, Toivonen J, Ruusuvaara L, Pikkola P, Nilsson CG, Luukkainen T. Return of ovulation after abortion and after discontinuation of oral contraceptives. <i>Fertility and Sterility</i> 1980;34(3):246-249.</p> |

| Recommendations | Rationales |
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| <p>b) IUDs should not be inserted in the following situations:</p> <ul style="list-style-type: none">● With confirmed or presumptive diagnosis of infection (signs of unsafe or unclean induced abortion, signs and symptoms of sepsis or infection, or inability to rule out infection), do not insert IUD until risk of infection has been ruled out or infection has fully resolved (approximately 3 months).● With serious trauma to the genital tract (uterine perforation, serious vaginal or cervical trauma, chemical burns), do not insert IUD until trauma has healed.● With hemorrhage and severe anemia, IUDs (inert or copper-bearing) are not advised until hemorrhage or severe anemia is resolved. However, progestin-releasing IUDs can be used with severe anemia (they decrease menstrual blood loss).● Post-abortion IUD insertion after 16 weeks gestation requires special training of the provider for correct fundal placement. If this is not possible, delay insertion for six weeks. | <p>b) After 16 weeks gestation, the uterine cavity will be too enlarged for post-abortion IUD placement to be accomplished by routine IUD insertion techniques. Only providers trained to do postpartum IUD insertion should perform immediate post-abortion IUD insertion for post-abortion clients after 16 weeks gestation.</p> <ol style="list-style-type: none">1) Maternal adaptation to pregnancy, in Pritchard JA, Macdonald PC (eds). <i>Williams Obstetrics</i>, 16th edition. New York, Appleton-Century-Crofts, 1980, p 223.2) Leonard AH, Ladipo OA. Postabortion family planning: Factors in individual choice of contraceptive methods. <i>Advances in Abortion Care</i>. 1994;4(2):1-4. |

Q.6. What is an appropriate follow-up schedule after intrauterine device (IUD) insertion?

| Recommendations | Rationales |
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| <p>a) There should be one follow-up visit approximately one month after insertion; thereafter, there is no need for a fixed follow-up schedule.</p> <p>b) The client should be strongly encouraged to come to the clinic anytime she has questions or problems, particularly if she has:</p> <ul style="list-style-type: none">● late period (possible pregnancy),● prolonged or excessive abnormal spotting or bleeding,● abdominal pain or pain with intercourse,● infection exposure (such as gonorrhea), abnormal vaginal discharge or pelvic pain especially with fever, or● string missing or string seems shorter or longer. <p>c) Visits are encouraged for other preventive reproductive health care as available, including provision of condoms, when appropriate.</p> | <p>a-c) A follow-up visit at 3 to 6 weeks is prudent as the peak incidence of pelvic inflammatory disease (PID) post-IUD insertion is at one month. Thereafter, there is no need for a fixed follow-up schedule. The best quality of care is to focus clinic resources and attention on those women who come back to the clinic with complaints or problems.</p> <ol style="list-style-type: none">1) Farley TM, Rosenberg MJ, Rowe PJ, Chen JH, Meirik O. Intrauterine devices and pelvic inflammatory disease: An international perspective. <i>The Lancet</i> 1992;339:785-788.2) Janowitz B, Dighe NM, Hubacher D, Petrick T. Assessing the impact of IUD revisits. Family Health International. Presented at a meeting of the American Public Health Association in San Francisco, California, October 1992. |

Q.7. Is there a need for a routine pre-exam (a separate visit) before intrauterine device (IUD) insertion?

| Recommendations | Rationales |
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| a) No. If at all possible, handle all counseling and screening the same day as the insertion. | a) There is no medical need for a pre-exam (separate visit); it may be difficult for a woman to make two visits, and she may be at risk of pregnancy during this interval. |

Q.8. Is there a minimum or maximum age to receive intrauterine devices (IUDs)?

| Recommendations | Rationales |
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| <p>a) There is no minimum or maximum age, as long as the woman is at risk of pregnancy.</p> <p>b) To receive an IUD, all women, especially young women, should be at low risk of sexually transmitted diseases (STDs) and receive careful counseling in order to understand potential risk of pelvic inflammatory disease (PID)/infertility (possibly due to infection during IUD insertion and/or lack of protection against pelvic infection when exposed to STDs).</p> | <p>a-b) The risk of PID is higher, statistically, among younger women. IUDs, in comparison to all other modern contraceptive methods, increase the risk of PID when a woman is infected with an STD. In addition, poor aseptic procedure during IUD insertion may introduce bacteria into the upper genital tract, which may lead to PID. Clients must be informed of these facts before choosing IUDs.</p> <ol style="list-style-type: none"> 1) Farley TM, Rosenberg MJ, Rowe PJ, Chen JH, Meirik O. Intrauterine devices and pelvic inflammatory disease: An international perspective. <i>The Lancet</i> 1992;339:785-788. 2) Lee NC, Rubin GL, Ory HW, Burkman RT. Type of intrauterine device and the risk of pelvic inflammatory disease. <i>Obstetrics and Gynecology</i> 1983;62:1-6. 3) Lee NC, Rubin GL, Borucki R. The intrauterine device and pelvic inflammatory disease revisited: New results from the women's health study. <i>Obstetrics and Gynecology</i> 1988;72(1):1-6. 4) Cramer DW, Schiff I, Schoenbaum SC, et al. Tubal infertility and intrauterine device. <i>The New England Journal of Medicine</i> 1985;15:941-6. 5) Darling JR, Weiss NS, Voigt LF, McKnight B, Moore DE. The intrauterine device and primary tubal infertility. Letter to <i>The New England Journal of Medicine</i> 1992;326(3):203-4. 6) Darling JR, Weiss NS, Metch BJ, Chow WH, Soderstrom RM, Moore DE, Spadoni LR, Stadel BV. Primary tubal infertility in relation to use of an intrauterine device. <i>The New England Journal of Medicine</i> 1985;312(15):937-41. 7) Task Force on Intrauterine Devices, Special Programme of Research, Development and Research Training in Human Reproduction, World Health Organization. PID associated with fertility regulating agents. <i>Contraception</i> 1984;30(1): 1-21. |

Q.9. Can nulliparous women receive intrauterine devices (IUDs)? Should young nulliparous women receive IUDs?

| Recommendations | Rationale |
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| <p>a) Yes. However, IUDs should not be the first choice of contraception in nulliparous women. To receive IUDs, all women, especially young women, should not be at risk of sexually transmitted diseases (STDs). Counseling should focus on the increased risk of pelvic inflammatory disease (PID) and possible infertility in IUD users who have or adopt a sexual behavior that poses them at an increased risk of STDs. It is appropriate to warn women that the IUD has an increased risk of STD-associated PID and infertility.</p> <p>b) An IUD may be provided to young nulliparous women only after careful and thorough consideration. An IUD is only recommended for young nulliparous women if they are living in a stable, mutually faithful relationship.</p> | <p>a-b) Young women statistically have a higher risk of PID. IUDs, in comparison to all other modern contraceptive methods, increase the risk of PID when a woman is infected with an STD. PID is a major risk factor for tubal infertility and ectopic pregnancy. Because young women may have patterns of sexual activity that lead to STD risk, the relative risk of PID in young IUD users may be high. Additionally, nulliparous women receiving IUDs may be at higher risk for expulsion.</p> <p>The degree to which a client values future fertility is an important factor in the choice of a contraceptive method. Studies have shown that the risk of PID and subsequent tubal-factor infertility is directly proportional to the risk of exposure to STDs. IUDs do not protect women against PID or other STDs.</p> <p>Nevertheless, women should be allowed to make their own choice.</p> <ol style="list-style-type: none"> 1) World Health Organization Task Force of Intrauterine Devices, Special Programme of Research, Development and Research Training in Human Reproduction. PID associated with fertility regulating agents. <i>Contraception</i> 1984;30(1):1-21. 2) Petersen KR, Brooks L, Jacobsen B, Skouky SO. Intrauterine devices in nulliparous women. <i>Advances in Contraception</i> 1991;7(4):333-8. 3) Angle MA, Brown LA, Buekens P. IUD protocols for international training. <i>Studies in Family Planning</i> 1993;24(2):125-31. 4) Luukkainen T, Nielson NC, Nygren KG, Pyorala T. Nulliparous women, IUD and pelvic infection. <i>Annals of Clinical Research</i> 1979;11:121-4. |

Q.10. a) Is there a need for a "rest period" with intrauterine devices (IUDs) after a certain period of use? b) Are there medical reasons for removal of an IUD?

| Recommendations | Rationales |
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| <p>a) If a woman wants a new IUD when an old one has expired, no rest period is needed.</p> <p>b) IUD removal is indicated if:</p> <ul style="list-style-type: none"> ● the woman requests removal, ● the woman develops precautions/contraindications, or ● the effective life of the IUD is reached (e.g., the full effective life of the CuT 380A is currently 10 years). | <p>a-b) The removal and reinsertion of an IUD exposes a woman to a small risk of introduction of vaginal or endocervical canal microorganisms into the upper genital tract. For this reason, long-acting IUDs are preferred. The Copper T 380A has been shown to be effective for at least 10 years.</p> <ol style="list-style-type: none"> 1) Farley TM, Rosenberg MJ, Rowe PJ, Chen JH, Meirik O. Intrauterine devices and pelvic inflammatory disease: An international perspective. <i>The Lancet</i> 1992;339:785-788. 2) Kjael A, Laursen K, Thormann L, Barggaard O, Lebech P. Copper release from copper intrauterine devices removed after up to 8 years of use. <i>Contraception</i> 1993;47(4):349-350. 3) Copper T 380A intrauterine device is effective for 10 years. News Release, The Population Council, New York, NY, September 27, 1994. |

Q.11. Following removal of an IUD (for reasons of partial expulsion without infection, or expiration of the IUD), should one wait to insert another?

| Recommendations | Rationales |
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| <p>a) If the client wants to continue the method, do not wait to reinsert a new intrauterine device (IUD) after old IUD removal, provided pregnancy has been ruled out, and no new precautions/contraindications have developed (see Q.1.).</p> <p>b) Make sure removal of the first IUD is indicated (i.e., for reasons of partial expulsion without infection or expiration of the IUD).</p> | <p>a-b) Even with proper technique, the removal and reinsertion of an IUD exposes a woman to the risk of introduction of vaginal and endocervical canal microorganisms into the upper genital tract. Therefore, removal and insertion at the same time avoids two separate exposures.</p> <p>1) Farley TM, Rosenberg MJ, Rowe PJ, Chen JH, Meirik O. Intrauterine devices and pelvic inflammatory disease: An international perspective. <i>The Lancet</i> 1992;339:785-788.</p> <p>In an interval between removal of one IUD and insertion of another, the woman will not be protected against pregnancy by the method of her choice.</p> |

Q.12. If a woman is at low risk of sexually transmitted diseases (STDs) based on history, may intrauterine devices (IUDs) be inserted without any lab tests if there is no mucopurulent endocervical discharge or clinically apparent pelvic inflammatory disease (PID) or cervicitis?

| Recommendations | Rationales |
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| <p>a) Yes, if the woman has no current risk factors for STDs (by history and on exam) and she has no apparent clinical signs or symptoms of infection (including normal bimanual exam).</p> <p>b) If PID, mucopurulent endocervical discharge, cervicitis or clinically apparent vaginitis is present, do not insert IUD, but treat for infection. Consider other contraceptive methods, if an STD* is suspected.</p> <p>* NOTE: Not all clinically-apparent vaginal infections are due to STDs.</p> | <p>a-b) Currently available lab tests may be impractical and often unaffordable (even in the developed world) to rule out endocervical colonization by infectious agents capable of ascending and causing PID. Most chlamydia tests are only 80 to 90% sensitive, tests for mycoplasma and ureaplasma are not routinely available, and cervical gram stain is less sensitive for gonorrhea. However, where gonorrhea culture and chlamydia tests are affordable, negative test results provide reassurance to corroborate the woman's history.</p> <ol style="list-style-type: none"> 1) Kramer D, Brown S. Sexually transmitted diseases and infertility. <i>International Journal of Gynaecology and Obstetrics</i> 1984;22:19-27. 2) Bell TA, Grayston JT. Centers for Disease Control guidelines for prevention and control of Chlamydia trachomatis infections. <i>Annals of Internal Medicine</i> 1986;104:524-526. 3) Nasello M, Callihan D, Menpus M, Steighigel R. A solid-phase enzyme immunoassay (gonozyme®) test for direct detection of Neisseria gonorrhoeae antigen in urogenital specimens from patients at a sexually transmitted disease clinic. <i>Sexually Transmitted Diseases</i> 1985;(October-December):198-202. |

Q.13. Should an intrauterine device (IUD) be removed if the partner complains about the string?

| Recommendations | Rationales |
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| <p>Not necessarily.</p> <p>a) Counsel – explain to the woman and/or her partner what the partner is feeling and recommend they try again.</p> <p>b) Describe to the client her other options (and their disadvantages):</p> <ul style="list-style-type: none">● The string can be cut short so that it does not protrude from the cervical os; inform the woman that she would not be able to feel the string and that, at the time of IUD removal, narrow forceps will be needed to remove the IUD (this entails a small additional infection risk). If a string is cut flush with the cervix, record in the chart and tell the woman that the string is located at the opening of the os for future removal. <p>OR</p> <ul style="list-style-type: none">● Offer to remove the IUD, if other options are not acceptable. <p>c) If partner complaints occur frequently, the service provider's technique should be reviewed. Strings should be cut approximately 3 cm from the external os.</p> | <p>a-c) For IUD services, the woman's preferences are the service provider's appropriate focus.</p> |

Q.14. If the cervix is red due to eversion of the squamo-columnar junction (ectopy/ectropion), may the intrauterine device (IUD) be inserted without further investigation?

| Recommendations | Rationales |
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| a) Yes, the IUD may be inserted for clients with cervical ectopy/ectropion, if not at risk of sexually transmitted diseases and the pelvic exam is normal (no cervicitis). | <p>a) Cervical ectropion (the presence on the ectocervix of columnar epithelial cells from the endocervix) is a normal condition in adolescents and in pregnancy, and is distinct from cervical infection.</p> <p>1) Paavonen J, Koutsky LA, Kiviat N. Cervical neoplasia and other STD-related genital and anal neoplasias, in Holmes KK, Mårdh P, Sparling PF, Wiesner PJ, Cates W, Lemon SM, Stamm W (eds). <i>Sexually Transmitted Diseases</i>. New York, McGraw-Hill Book Co., 1984, pp 561-592.</p> <p>IUD insertions and continued use of the IUD have no relation to risk of cervical carcinoma.</p> <p>1) Lasse DL, Savitz DA, Hamman RF, Baron AE, Brinton LA, Levines RS. Invasive cervical cancer and intrauterine device use. <i>International Journal of Epidemiology</i> 1991;20(4):865-870.</p> <p>Since chlamydia is an intracellular parasite of columnar epithelial cells, women with ectropion may be more likely to have positive chlamydia tests.</p> <p>1) Harrison HR, Costin M, Meder JB, Bowds LM, Sim DA, Lewis M, Alexander ER. Cervical chlamydia trachomatis infection in university women: Relationship to history, contraception, ectopy and cervicitis. <i>American Journal of Obstetrics and Gynecology</i> 1985;153(3):244-51.</p> |

Q.15. If a woman complains of heavier menses or bleeding between menses, is there a medical basis for the intrauterine device (IUD) to be removed?

| Recommendations | Rationales |
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| <p>Not necessarily.</p> <p>a) As in pre-method choice counseling, women should be informed that menses are normally heavier with the IUD and intermenstrual bleeding may occur, especially in the first few months. Inert IUDs should not be the first choice, for this reason.</p> <p>Give nutritional advice on the need to increase the intake of iron-containing foods.</p> | <p>a) In general, IUDs (especially inert IUDs) commonly increase the amount of menstrual blood loss, according to IUD type, particularly in the first few months post-insertion.</p> <p>1) Cohen B, Gibor Y. Anemia and menstrual blood loss. <i>Obstetrical and Gynecological Survey</i> 1980;35(10):597-618.</p> <p>Copper IUDs may increase normal menstrual blood loss by 50%, which may be clinically significant for women who are already anemic. (Progestin-releasing IUDs decrease menstrual blood loss; the more progestin an IUD releases, the more effectively it decreases menstrual blood loss.)</p> <p>1) Andrade A, Pizarro E. Quantitative studies on menstrual blood loss in IUD users. <i>Contraception</i> 1987;36(1):129-144.</p> |

| Recommendations | Rationales |
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| <p>b) For mild to moderate bleeding and pain in the first month post-insertion, with no evidence of clinically apparent pelvic infection, and if reassurance is not sufficient but the woman wants to keep the IUD, a short course of a non-steroidal anti-inflammatory agent other than aspirin (e.g., ibuprofen) may be given.</p> <p>c) Bleeding generally decreases over time. If bleeding is heavy or the woman is anemic, treatment using oral iron can improve hemoglobin levels.</p> <p>d) If bleeding or pain is severe, or the client wishes to discontinue use, remove the IUD.</p> <p>e) If suspected, abnormal conditions which cause prolonged or heavy bleeding should be evaluated and treated as appropriate.</p> <p>f) If pelvic infection is diagnosed, remove the IUD, and treat with antibiotics. (In the case of mild uterine tenderness without any other evidence of pelvic infection, broad spectrum antibiotics or chemotherapeutics may solve the problem; use clinical judgement regarding whether or not to remove the IUD).</p> | <p>b) Non-steroidal anti-inflammatory drugs (e.g., ibuprofen*) decrease uterine bleeding and cramping.</p> <p>1) Drug facts and comparisons. St. Louis, MO, <i>Facts and Comparisons</i> 1993, p 251.</p> <p>* NOTE: Nonsteroidal anti-inflammatory drugs (e.g., ibuprofen) should be used instead of aspirin because of aspirin's stronger and longer-lasting inhibitory effects on platelet aggregation (aspirin promotes bleeding).</p> <p>1) <i>American Hospital Formulary Service Drug Information</i>. Bethesda, MD, American Society of Hospital Pharmacists, 1994, p 1208.</p> <p>2) Field CS. Dysfunctional uterine bleeding. <i>Primary Care</i> 1988;15(3):561-574.</p> |

Q.16. Can intrauterine devices (IUDs) be safely inserted by trained nurses and midwives?

| Recommendations | Rationales |
|---|---|
| a) Yes, IUDs (including immediate postpartum and post-abortion insertion) can be safely inserted by nurses and midwives, who are appropriately trained according to relevant national or institutional standards. | a) Nurses or midwives have been shown to have equal or superior competence in IUD insertion when compared to doctors. 1) Eren V, Ramos R, Gray RH. Physicians vs. auxiliary nurse-midwives as providers of IUD services: A study in Turkey and the Philippines. <i>Studies in Family Planning</i> 1983;14:43-47. |

Q.17. How much time should elapse between sexually transmitted disease (STD) treatment and insertion? What about previous STD incidence?

| Recommendations | Rationales |
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| <p>a) If the client will not be at high risk of an STD in the future, treat the STD today and insert the intrauterine device (IUD) when the infection is resolved (for acute PID, wait 3 months).</p> <p>If she remains at increased risk of pelvic inflammatory disease (PID), advise against IUD use.</p> | <p>a) PID may take several weeks to resolve clinically, and, in the case of severe PID, waiting several months, in theory, allows healthy tissues (free of micro-abscesses) to form.</p> <p>1) Sweet RL, Draper DL, Hadley WK. Etiology of acute salpingitis: Influence of episode number and duration of symptoms. <i>Obstetrics and Gynecology</i> 1981;58:62-68.</p> <p>Women with prior PID are at increased risk of repeat PID. A woman who has had an episode of upper reproductive tract infection may be at increased risk of repeat episodes of non-sexually transmitted PID regardless of IUD use. Theoretically, a previous episode of upper reproductive tract infection may result in tubal damage increasing susceptibility of the fallopian tubes to opportunistic lower genital tract flora.</p> <p>1) Weström L, Mårdh P. Acute pelvic inflammatory disease (PID), in Holmes KK, Mårdh P, Sparling PF, Wiesner PJ, Cates W, Lemon SM, Stamm W. (eds). <i>Sexually Transmitted Diseases</i>, 2nd edition. New York, McGraw-Hill Information Services Company, Health Professions Division, 1990, pp 596-613.</p> <p>2) Keith L, Berger GS. The etiology of pelvic inflammatory disease. <i>Research Frontiers in Fertility Regulation</i> 1984;3(1):1-16.</p> |

Q.18. Should intrauterine devices (IUDs) be provided if infection prevention measures cannot be followed?

| Recommendations | Rationales |
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| <p>a) No.</p> <p>All sites inserting and/or removing IUDs should follow basic infection prevention measures, including:</p> <ul style="list-style-type: none"> ● aseptic technique (including appropriate handwashing by the provider and careful preparation of the cervix), ● sterile (or high-level disinfected) IUDs and equipment, ● correct decontamination of instruments, and ● safe disposal of contaminated disposables. | <p>a) The potential for infection in IUD users is increased in areas where genital tract infections (GTI) such as gonorrhea and chlamydia are prevalent. By following recommended infection prevention processes, however, health workers can minimize the risk of post-IUD insertion infection to clients and the danger of transmitting infections, even hepatitis B or AIDS, to their clients, their co-workers or themselves.</p> <p>1) Tietjen L, Cronin W, McIntosh N. <i>Infection Prevention for Family Planning Service Programs: A Problem-Solving Reference Manual</i>. Durant, OK, Essential Medical Information Systems, Inc., 1992, p 168.</p> <p>Sterilization is the safest and most effective method for processing instruments which come in contact with the bloodstream, tissue beneath the skin or tissues which are normally sterile. When sterilization equipment is either not available or not suitable, high-level disinfection (HLD) is the only acceptable alternative. HLD destroys all microorganisms, including viruses causing hepatitis B and AIDS, but does not reliably kill all bacterial endospores. For example, in family planning facilities, either sterilization or HLD are acceptable for processing instruments and gloves used for pelvic exams and IUD insertion and removal, since problems with endospores (Clostridia species) have not been reported with IUD use. Regardless of the method selected, however, HLD can only be effective when used (soiled) instruments and gloves are first decontaminated, thoroughly cleaned and rinsed before disinfection.</p> <p>1) Tietjen L, Cronin W, McIntosh N. <i>Infection Prevention for Family Planning Service Programs: A Problem-Solving Reference Manual</i>. Durant, OK, Essential Medical Information Systems, Inc., 1992, p 34.</p> <p>Contaminated wastes may carry high loads of microorganisms which are potentially infectious to any persons who contact or handle the waste.</p> |

| Recommendations | Rationales |
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| | <p>Incineration provides high temperatures and destroys microorganisms; therefore, it is the best method for disposal of contaminated wastes. Incineration also reduces the bulk size of wastes to be buried. If incineration is not possible, all contaminated wastes must be buried to prevent scattering the waste materials.</p> <p>1) Tietjen L, Cronin W, McIntosh N. <i>Infection Prevention for Family Planning Service Programs: A Problem-Solving Reference Manual</i>. Durant, OK, Essential Medical Information Systems, Inc., 1992, p 97.</p> |

Q.19. Is it advisable to routinely give prophylactic antibiotics for intrauterine device (IUD) insertion?

| Recommendations | Rationales |
|--|---|
| <p>No, most authorities do not routinely recommend it, because there is no clear evidence that prophylactic antibiotics definitely prevent pelvic inflammatory disease (PID) in IUD users and the studies so far have found only a trivial impact on PID rates due to prophylactic antibiotics. However, opinions differ and there are arguments to support both sides.</p> <p>There is a theoretical rationale for the practice of giving prophylactic antibiotics. PID rates in IUD users are highest in the first few weeks and antibiotics could reduce those PID rates. While there is no statistically significant evidence of a reduction in PID rates, one study found a lower rate of IUD-related unplanned returns to the clinic.</p> <p>Arguments against the use of prophylactic antibiotics include the insignificant impact of antibiotics on reducing the PID rates in IUD users demonstrated in previous studies. Also, although the rate of PID in IUD users is highest in the first few weeks after insertion, due to the long duration of use of IUDs, the greatest numbers of PID cases will occur after the first few weeks after insertion. In addition, there is some concern about the programmatic feasibility and cost of prophylactic antibiotics.</p> <p>Good infection control procedures, proper assessment of the client's risk for sexually transmitted diseases (STDs), and proper insertions are very important to keep the rate of PID low in IUD clients.</p> | <p>The scientific literature does not show any large advantage in reducing PID rates by giving prophylactic antibiotics for IUD insertion. However, in each of the studies, infection prevention procedures were followed and the rates of PID were very low. Also, the sample sizes in the studies were small.</p> <p>Although not statistically significant, three studies all showed some reduction in the PID rate in women given prophylactic antibiotics.</p> <p>Sinei et al found that the PID rate for the first month after IUD insertion in women who were given doxycycline was 1.3% compared to 1.9% in the women who received a placebo. They also found that the women who received a placebo returned to the clinic for IUD-related problems that were suggestive of subclinical PID more often than the treated women.</p> <p>Zorlu et al. found infection rates to be 2.1% and 2.9% in the doxycycline treated and the untreated women, respectively, within the first three months after IUD insertion.</p> <p>Walsh et al. found that within the first three months after IUD insertion, 3.6% of the doxycycline group had the IUD removed for medical reasons compared to 4.5% of the placebo group.</p> <ol style="list-style-type: none"> 1) Walsh T, Bernstein G, Grimes D, Freziers R, Bernstein L, Coulson A, et al. Effect of prophylactic antibiotics on morbidity associated with IUD insertion: results of a pilot randomized controlled trial. <i>Contraception</i> 1994;50:319-27. 2) Sinei S, Schulz K, Lamprey P, Grimes D, Mati J, Rosenthal S, et al. Preventing IUCD-related pelvic infection. <i>British Journal of Obstetrics and Gynaecology</i> 1990;97:412-9. 3) Zorlu C, Aral K, Cobanoglu O, Gurler S, Gokmen O. Pelvic inflammatory disease and intrauterine devices. <i>Advances in Contraception</i> 1993;9:299-302. 4) Ladipo OA, Farr G, Otolorin E, Konje JC, Sturgen K, Cox P, et al. Prevention of IUD-related pelvic infection: the efficacy of prophylactic doxycycline at IUD insertion. <i>Advances in Contraception</i> 1991;7:43-54. |

Recommendations

Rationales

- | Recommendations | Rationales |
|-----------------|---|
| | 5) Farley T, Rosenberg M, Rowe P, Chen J, Meirik O. Intrauterine devices and pelvic inflammatory disease: an international perspective. <i>Lancet</i> 1992;339:785-8. |

Classification of Selected Procedures for Intrauterine Devices (IUDs)

| Procedure | Class | Rationale |
|--|-------|---|
| Pelvic examination (speculum and bimanual) | A | <ul style="list-style-type: none"> ● Bimanual and speculum exams are mandatory before IUD use, to rule out contraindications: pregnancy, pelvic inflammatory disease (PID) and endocervical infection, and to determine uterine position in order to avoid perforation. ● If the woman is pregnant, presence of the IUD will lead to spontaneous abortion (miscarriage) in about half of all pregnancies, and there is significant risk of septic abortion¹. ● If a purulent endocervical discharge is present, at the time the IUD is inserted through the cervical canal, bacteria in the canal may be introduced into the sterile uterine cavity and lead to PID¹. The woman and her partner(s) must be treated before considering IUD insertion. |
| Blood pressure | C | <ul style="list-style-type: none"> ● IUD use does not affect blood pressure². ● Screening for high blood pressure is part of optimal preventive health care. |
| Breast examination | C | <ul style="list-style-type: none"> ● For all women of reproductive age or beyond, a breast exam is recommended for optimal health care. ● IUD use does not cause (nor increase the risk of) breast cancer. |
| STD screening by history | A | <ul style="list-style-type: none"> ● Assessment of STD risk by personal history and socio-demographic risk factors is an important method of identifying women at risk of PID. ● Assessment of STD risk permits empiric therapy of client and presumptive treatment of partner. |

| Procedure | Class | Rationale |
|--|-------|---|
| Sexually transmitted disease (STD) screening by lab tests (for asymptomatic persons) | B | <ul style="list-style-type: none"> ● Assessment of STD risk by personal history and socio-demographic risk factors may be the most practical method of identifying women at risk for PID. The speculum and bimanual exam may also detect some STDs. Although STD lab tests may not be practical or affordable in many settings, in some cases it may be reasonable to supplement screening by history and physical exam with certain lab tests, especially where the client or the provider is concerned that the client may be of risk for STDs (clients with current signs or symptoms of STDs are not eligible for IUDs). When feasible, negative test results provide reassurance to corroborate the woman's history. It is important to try to avoid the imposition of additional visits in weighing the value of such tests. ● For those clients with a personal history or with socio-demographic risk factors which suggest high risk, the client who still makes an informed choice of an IUD must understand she may have an STD without any signs or symptoms. |
| Cervical cancer screening | C | <ul style="list-style-type: none"> ● Cervical cancer screening is indicated for women at risk of cervical carcinoma, and is recommended for optimal preventive health care for women of reproductive age or beyond (particularly women at risk of STDs). <p>NOTE: Cervical cancer screening is advised for optimal preventive care for all women at risk of cervical cancer (e.g., smokers, women with partners having multiple partners, women with young age at first intercourse, etc.). All women at risk should ideally have access to a practical method of cervical cancer screening, treatment and follow up.</p> <ul style="list-style-type: none"> ● IUD insertions and continued IUD use have no known relation to the risk of acquiring cervical carcinoma³. |

| Procedure | Class | Rationale |
|--|-------------------|--|
| <p>Routine, mandatory lab tests (e.g., cholesterol, glucose, liver function tests)</p> <ul style="list-style-type: none"> ● General counseling: <ul style="list-style-type: none"> – efficacy – common side effects – correct use of method – signs and symptoms for which to return to the clinic – STD protection (when/as appropriate) | <p>D</p> <p>A</p> | <p>Irrelevant to the use of copper-releasing IUDs for contraception.</p> <ul style="list-style-type: none"> ● Accurate client education is essential for maximum quality of family planning services. ● Appropriate counseling about common contraceptive side effects at the time of method selection can lead to improved client satisfaction and contraceptive continuation⁴. |
| <p>Specific counseling points related to IUDs:</p> <ul style="list-style-type: none"> ● Counseling concerning change in menses, including increased bleeding with copper-bearing IUDs. ● High risk behavior ● Counseling about condom use for women who, under certain circumstances, might become at high risk for STDs. | <p>A</p> | <ul style="list-style-type: none"> ● As in pre-method choice counseling, the women should be informed that menses are normally heavier with the IUD and intermenstrual bleeding may occur, particularly post insertion. Inert IUDs approximately double normal menstrual blood loss and copper IUDs may increase it by 50%, which may be clinically significant for women who are already anemic. The more progestin an IUD releases, the more effectively it decreases menstrual blood loss⁵. ● Women at risk should be counseled on high risk behavior for contracting STDs and potential complications from IUD use. Women should be instructed to return to the clinic for: abdominal pain, pain with intercourse, abnormal vaginal discharge or pelvic pain, especially with fever, or if the IUD string is missing or appears to be longer or shorter or if the client is not pleased with the method. ● When condoms are used as a back-up method, counseling should be given to increase correct use and compliance. ● Condoms offer the greatest potential for preventing STD spread among persons at risk for STDs. |

| Procedure | Class | Rationale |
|---|-------|---|
| NOTE: Women who are currently at high risk for STDs, in general should not receive IUDs. | | <ul style="list-style-type: none"> ● Counseling sessions providing skill training may increase the rate of condom use. |

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:

- 1) Mishell DR, Jr. Contraception, sterilization, and pregnancy termination, in Herbst AL, Mishell DR Jr., Stenchever MA, Droegmueller W (eds). *Comprehensive Gynecology*, 2nd edition. St. Louis, Mosby Year Book, 1992, pp 295-362.
- 2) WHO Special Programme of Research, Development and Research Training in Human Reproduction. The WHO multicentre trial of the vasopressor effects of combined oral contraceptives: 1. Comparisons with IUD. *Contraception* 1989;40(2):129-145.
- 3) Lassise DL, Savitz DA, Hamman RF, Barón AE, Brinton LA, Levines RS. Invasive cervical cancer and intrauterine device use. *International Journal of Epidemiology* 1991;20(4):865-870.
- 4) Cotten N, Standback J, Maidouka H, Taylor-Thomas JT, Turk T. Early discontinuation of contraceptive use in Niger and The Gambia. *International Family Planning Perspectives* 1992;18(4):145-149.
- 5) Andrade A, Pizarro E. Quantitative studies on menstrual blood loss in IUD users. *Contraception* 1987;36(1):129-144.