So you're thinking of becoming a parent

WELL, CONGRATULATIONS !!!

WE'RE HERE TO COUNSEL AND HELP YOU

Canadian HIV Pregnancy Planning Guidelines | Lignes directrices canadiennes en matière de planification de la grossesse en présence du VIH

Comment about language

- We acknowledge and respect the diversity of people, which includes trans and gender non-binary people.
- **Where possible, we have used gender-neutral language.**
- In some places gendered language (i.e. the terms “woman” and “female” to describe a person who is able to get pregnant, and “man” and “male” to refer to a person who intends to use their sperm for conception) have been used for clarity.
- We are open to ongoing suggestions and mentorship regarding the use of gender inclusive language when discussing pregnancy planning.

STEP 1: 'Female' Fertility Screening

- Of person intending pregnancy (whether HIV positive or negative)
  - Determine fertility history (i.e. are they ovulating regularly?)
    - Ask – "Do you have regular periods? If you do, it is likely that you are ovulating."
    - Ask – "Have you ever been pregnant before, even if it ended in a termination? If so, it is likely that you can get pregnant again."
    - Ask – "Do you have a history of any gynecological conditions (such as endometriosis, fibrosis), sexually transmitted infections (STIs) (e.g., chlamydia and gonorrhea) with or without pelvic inflammatory diseases, confirmed sub/infertility, adverse pregnancy outcomes or two or more spontaneous abortions?"
  - Do bloodwork including:
    - Routine HIV bloodwork (if relevant), CBC, ferritin, others as relevant
    - If no previous proof of immunity: rubella Ab (and if negative, they should be vaccinated if appropriate – i.e. can tolerate a live vaccine and not pregnant); varicella zoster (if negative, vaccinate if appropriate – i.e. can tolerate a live vaccine and not pregnant)
    - Beta HCG if any chance of pregnancy
  - Test for STIs – i.e. urine chlamydia and gonorrhea as well as also throat and rectal if relevant, syphilis, hepatitis C Ab and hepatitis B s Ag and an HIV test if HIV negative … the reason is to know about these as to not transmit to your sexual partner.

STEP 1 (cont.)

- Of person intending pregnancy (whether HIV positive or negative)
  - Review all medications being taken to ensure not on any that are teratogenic or that should not be taken.
  - Counsel
    - TO DETERMINE OVULATION: Mark down the first day your menstrual periods on a calendar ASAP and bring that data in to the care provider helping you. One is ovulating around 14 days before the next menstrual period … so this is a critical step. The more months you have the better..
    - Start taking 0.4-1 mg of **folic acid** ASAP ... It is best if this has been taken for 3 months prior to conception/pregnancy. Higher dose (5 mg) may be needed in certain cases and can be prescribed and covered in certain regions.
  - Review that it is a good idea to stop smoking before getting pregnant and that during pregnancy it is good to not drink alcohol or use other recreational drugs … help set up rehabilitation and treatment programs for addictions before conception/pregnancy if there are any issues. The nicotine patch can be given in pregnancy at 7 mg or 14 mg/24 hours (the high dose 21 mg/24 hour patch is not recommended in pregnancy) – prescribe it if she wants to quite smoking. Practice from a harm reduction model.

STEP 2: 'Male' Fertility Screening

- Person providing sperm (whether HIV positive or negative)
  - Have you ever gotten a person pregnant before? If so, it is likely that your sperm are functioning.
  - There are semen analyses that can be done to assess quantity of sperm but they are not easily accessible in many provinces at local laboratories. If it is easily accessed in your province, write SEMEN ANALYSIS on requisition. Otherwise, there is no need to do this at this point.
  - Test for STIs – i.e. urine chlamydia and gonorrhea as well as also throat if relevant, syphilis, hepatitis C Ab and hepatitis B s Ag and an HIV test if HIV negative … the reason is to know about these as to not transmit to your sexual partner.
  - Review all medications being taken to ensure not on any that are not spermatoxic – e.g. ribavirin.

STEP 3: Minimizing HIV Transmission

- The HIV-positive partner(s)
  - Should be under the care of an HIV care provider and seeing them regularly.
  - Should be taking effective combination antiretroviral therapy (ART) for at least 3 months preferably longer than 6 months and they should have had an undetectable viral load on at least two occasions at least 1 month part. The reason for this is that we want to know that that person has sustained viral suppression as to not transmit to the other partner.
  - If the person intending pregnancy is HIV+ and is on effective ART before getting pregnant and remains so during the entire pregnancy, the chance of the baby being infected is ZERO based on studies.
  - If the person intending pregnancy is HIV negative, the only way for the baby to be infected is if the virus is transmitted to the pregnant person during pregnancy. The actual sperm cell does not carry the virus (only the fluid that carries the sperm **if** there is a detectable viral load) and therefore the baby cannot be infected by the sperm cell that fertilizes the egg.

Do you know about U = U

- Over the past 10 years, there have been major studies showing that if the partner with HIV is on effective antiretroviral therapy (ART) with a suppressed viral load, HIV cannot be transmitted sexually, even without a condom (**i.e. the chance of transmission is ZERO**)
  - **This is known as U = U**

    (undetectable = untransmittable)
- We still go over all the options to conceive … on the next slide …

Studies showing that the risk of sexual HIV transmission when the HIV+ partner is on effective ART is 0

- HPTN 052 – final analysis – Sept 2016
  - Enrolled 1,763 serodiscordant couples (one HIV+ & one was HIV-), 98% heterosexual
  - HIV+ partner took antiretroviral therapy ->
  - 8 transmissions – 4 early after start of treatment; 4 during treatment failure – all had detectable viral loads; no transmissions when the HIV+ partner was on ARVs & viral load undetectable
- PARTNER STUDY – published July 2016
  - Enrolled 1,116 serodiscordant couples, 40% same-sex gay male
  - Inclusion criteria: sex without condoms some of the time, no PreP or PEP, HIV+ partner on ART + VL < 200/mL
  - 11 transmissions – 0 linked
  - i.e. no transmissions

Conclusion: ART and viral suppression prevents sexual transmission of HIV

Cohen et al. NEJM 2016 Sep;375(9):830-9

Rodger et al. J Acquir Immune Defic Syndr. 2016; 1;73(1):39-46.

STEP 4: Conception Methods

- Review all different options for conception (i.e. insemination) :

1. Condomless sex (HIV+ person on ART, full sustained viral suppression)
2. **Condomless sex timed with ovulation (HIV+ person on cART, full sustained viral suppression) … this is the preferred option (because compared to Option , it leads to higher chances of pregnancy***
3. Either above options with pre-exposure prophylaxis (PrEP) – not recommended in UK, Canada, Switzerland because no added benefit and costs more and putting person on drug that doesn't need to be
4. Home insemination with syringe (i.e. turkey baster method; used for when woman is HIV+ and man is HIV-, non-sexual partners)
5. Sperm washing with intrauterine insemination (IUI) (in fertility clinic; used for when man is HIV+ and woman is HIV-)
6. Other: IVF, ICSI, sperm donor, egg donation/gestational carriage
7. Adoption

***Option 2 is now the preferred method when possible/applicable)**

STEP 4 (cont.)

- More than one conception option is often acceptable and recommendable.
- Remember some options may not always be the most practical for the patient or couple based on availability of services, cost, cultural beliefs, personal risk evaluation, or clinical circumstance.
- The objective of preconception counselling is to help patient(s) make an informed decision.
- The chosen strategy is based on patient preference.
- Physicians and other health care providers should provide non-judgemental support of the decision of the patient(s) involved.

STEP 5: Supporting Conception

- It is important to track ovulation and to have condomless sex or sperm insemination the day before ovulation (time of LH surge) and the day of ovulation -> This creates the highest change of conceiving.
- Ovulating happens one day per month – so timing is crucial.
- Here are some ways that ovulation can be timed (see OVULATION HANDOUT – OVULATION 101 @ HIVpregnancyplanning.com):
  - Marking your calendar with the first day of your menstrual period. You are ovulating around 14 days before your next Menstrual period. There are great **Apps** for this now (e.g., Flo Ovia).
  - Your vaginal discharge becomes sticky when you are ovulating.
  - ½ of women get pain their side when they are ovulating – this is called Mittelschmerz pain
  - You can buy ovulation sticks from the dollar store and start urinating on them in the morning about 3-4 days before the predicted ovulation. When there is 2 lines that signifies the LH surge and ovulation is happening the next day.

STEP 6: Recommended Referral Timelines

- If the person intending pregnancy is less than 35, conception should be attempted every month for 12 months before referral to a fertility clinic.
- If the person intending pregnancy is between 35 and 40, conception should be attempted every month for 6 months before referral.
- If the person intending pregnancy is over 40, conception should be attempted every month for 3 months before referral or immediately.
  - Particularly if there is any indication of sub-optimal fertility.
- Risk factors for infertility should be considered including:
  - History of STIs (chlamydia and gonorrhea with or without pelvic inflammatory disease
  - Endometriosis
  - Known history of infertility/sub-optimal fertility

Any Other Questions?

- I usually book patients trying to conceive once every 1-2 months to review the timing of ovulation and answer any questions.

- Feel free to photocopy this counselling presentation and give a copy to the patient(s).

Updated by Dr. Mona Loutfy, 25-NOVEMBER-2020