Does hormonal contraception modify the risk of STI acquisition?

Sexually transmitted infections, or STIs, are infections that are passed from one person to another through vaginal, anal and sometimes oral sex. Although condom use can decrease or prevent transmission of many of these diseases, STIs remain an important and common condition, affecting 340 million people worldwide each year (1).

There are many factors that increase the chance of developing an STI. The most common ones are: having multiple sexual partners, having sexual intercourse with partners who have more than one sexual partner, not using condoms during intercourse, the presence of genital ulcer disease, young age, and previously having had an STI.

What is not established is whether a woman’s use of hormonal contraceptives may increase her risk of developing an STI. Hormonal methods include combined pills, combined injections, progestin-only injections such as DMPA (depot medroxyprogesterone acetate), progestin-only pills, the patch, the vaginal ring and implants. Numerous studies have investigated this subject, however the answers are not clear. What is clear is that none of these methods protects a woman from acquiring an STI; therefore, providers should counsel women at risk of infection to use condoms during each act of intercourse, even if they are already using another contraceptive method.

Assessing the results of the studies carried out to date is difficult because of study design issues. First, from an ethical point of view, randomization is not possible in respect to contraceptive methods, and method choice (such as whether or not to choose the condom as a method) may be related to the perception of STI. Second, many of the studies are performed among commercial sex workers, and their sexual behaviour is different enough from most women that their findings may not apply to other women. Next, to understand the study results, an attempt must be made to measure the many confounders of STI acquisition, such as STI exposure, sexual behaviours, and condom use in these studies; however, many do not attempt this. This is concerning because confounders are elements that may affect STI acquisition, independent of the use of a hormonal contraceptive.

The majority of studies have looked at chlamydia in users of combined oral contraceptives or depot medroxyprogesterone. These studies generally report positive associations with chlamydial infection, although not all associations were statistically significant. For other STIs, the results suggest no association between hormonal contraceptive use and their acquisition, or the results were too limited to draw any conclusions. Data are generally limited in their amount and in their quality, particularly in regards to the confounding factors discussed previously. Some of the positive associations are likely due to different exposures to STIs by women using a particular contraceptive, or higher likelihoods of detecting STIs in the contraceptive users.
Given that this area is difficult to study well and a finding of increased risk of STI infection with hormonal contraception would have an impact on the appropriate use of hormonal contraception, the WHO Expert Working Group reviewed these studies and their findings to determine whether women at risk for STIs should use hormonal contraceptive methods. After extensive review, the Working Group determined that there should be no restriction of use for any of the hormonal contraceptives for any woman based on her estimated risk of acquiring an STI. These recommendations may be found in the Medical Eligibility Criteria for Contraceptive Use. The guidelines also emphasize that hormonal contraception does not protect against STI infection (including HIV) and that the correct and consistent use of condoms is recommended, either alone or in combination with a family planning method, to prevent against STI and HIV.

References

For more information contact:
Dr Nathalie Kapp
Department of Reproductive Health and Research
World Health Organization
Avenue Appia 20, CH-1211 Geneva 27, Switzerland
Tel: +41 22 791 3437
Fax: +41 22 791 4189 / 4171
E-mail: kappn@who.int

Internet address:
www.who.int/reproductive-health

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