



Faculty of Sexual & Reproductive Healthcare Statement from the Clinical Effectiveness Unit

St John's Wort and Hormonal Contraception

March 2014

The Medicines and Healthcare Regulatory Agency (MHRA) has released a statement highlighting a reduced contraceptive effect associated with the use of St John's wort and hormonal contraception:

<http://www.mhra.gov.uk/Safetyinformation/DrugSafetyUpdate/CON392869>.

St John's wort is a herbal product that is used for depressive symptoms and is known to have enzyme-inducing effects on cytochrome p450 enzymes. The MHRA statement highlights that in the last quarter of 2013, two 'Yellow Card' reports were received relating to unplanned pregnancies, in women with progestogen-only implants, suspected to be the result of an interaction with St John's wort. The MHRA states that since 2000, a total of 19 reports of suspected interactions between St John's wort and hormonal contraceptives have been received through the 'Yellow Card' system.

Faculty of Sexual and Reproductive Healthcare (FSRH) guidance on *Drug Interactions with Hormonal Contraception*⁽¹⁾ states that enzyme-inducing drugs have the potential to reduce the efficacy of combined hormonal contraceptives, progestogen-only pills, oral emergency contraceptives, and the progestogen-only implant. FSRH advice is that women should ideally switch to a method that is considered to be unaffected by these drugs, such as the progestogen-only injectable (depot medroxyprogesterone acetate (DMPA)) or intrauterine methods; other solutions for short-term use are also detailed. The clearance of DMPA is approximately equal to the rate of hepatic blood flow. For this reason, it is unlikely that drugs that induce hepatic enzymes will significantly affect the kinetics of DMPA^(2:3). Pharmacokinetic data from studies of antiretroviral drugs support this assertion^(4:5). Most of the contraceptive effect of the levonorgestrel-releasing intrauterine system (LNG-IUS) is mediated via the

direct release of progestogen into the uterine cavity and is therefore presumed to be unaffected by metabolism in the liver.

The FSRH would advise that:

- Women using combined hormonal contraceptives, progestogen-only pills, oral emergency contraception or the progestogen-only implant require alternative contraception or use of additional precautions when taking drugs that induce enzymes, including St Johns wort.
- Women should be encouraged to read the patient information leaflets that come with their hormonal contraceptive and to seek guidance from a healthcare professional when starting any medication including herbal products such as St Johns wort.
- Although there is currently no strong evidence that recreational drugs or dietary supplements interact with contraception, it is good practice to document all concomitant drug use in case of future reports of adverse effects or interactions.
- Any suspected interaction should be reported to the MHRA via the 'Yellow Card' reporting system.

In addition to checking FSRH guidance, the FSRH strongly recommends that healthcare professionals check regularly updated sources of information when considering drug interactions with hormonal contraceptives, such as:

The British National Formulary
electronic Medicines Compendium
Stockley's Drug Interactions
HIV Drug Interactions

www.bnf.org
www.medicines.org.uk/emc
www.medicinescomplete.com
www.hiv-druginteractions.org

Reference List

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<http://www.fsrh.org/pdfs/CEUGuidanceDrugInteractionsHormonal.pdf>. 2011.
- (2) Pfizer Limited. Sayana Press:Summary of Product Characteristics. 2013.
<http://www.medicines.org.uk/emc/medicine/27798/SPC/SAYANA+PRESS+104+mg+0.65+ml+suspension+for+injection>
- (3) Pfizer Limited. Depo-Provera 150mg / ml injection. 2012.
<http://www.medicines.org.uk/emc/medicine/11121/SPC/Depo-Provera+150mg+ml+Injection/> (accessed 19/03/14)
- (4) Watts DH, Park JG, Cohn SE, Yu SHJ, Stek A, Clax PA, et al. Safety and Tolerability of DMPA among HIV infected women on antiretroviral therapy. *Contraception* 2008;72((2)):84-90.
- (5) Nanda K, Amaral E, Hays M, Viscola MAM, Mehta N, Bahamondes L. Pharmacokinetic interactions between depot medroxyprogesterone acetate and combination antiretroviral therapy. *Fertility and Sterility* 2008;90(4):965-71.