INTERACTION BETWEEN ETONOGESTREL-RELEASEING IMPLANT AND 3 ANTIRETROVIRAL REGIMENS

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Background

- High unplanned pregnancy rates are a public health problem because they negatively influence several indicators of women's and child's health and in HIV infected women may result in vertical transmission.

- Long-acting reversible contraceptives (LARCs), such as the etonogestrel (ENG) releasing implant have the highest efficacy and continuations rates among all reversible contraceptives.

Methods

- We enrolled postpartum women who desired to use ENG (etionogestrel 80 mg/day) as the third method of contraception for up to 3 years when it should be removed.

- Median (range) ENG concentration within the first few weeks of implant insertion. ENG sample was obtained once at 6-7 weeks after insertion.

- Plasma samples collected at 0, 1, 2, 6, 8, 12 hours post-dose after insertion. ENG implant was inserted between 2 and 12 weeks postpartum.

- We evaluated both the effect of ENG on the PK parameters of 3 highly antiretroviral (ARV) regimens including: ritonavir boosted lopinavir/ritonavir (LPV/r) or efavirenz (EFV) and the effect of these ARVs on ENG levels in HIV infected postpartum women.

Results

- No significant change in ENG concentrations and ARV/AUCs among these three arms. Median ENG concentration of EFV arm was <10% of the other two arms.

Conclusions

- Co-administration of LPV/r and ATV/r with ENG resulted in adequate ENG concentration, suggesting that these combinations should have no impact on implant efficacy.

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4. Contraception for women under EFV or ATV.

5. - Women receiving EFV should be counseled about the increased risk of infection and failure to use alternative or additional contraceptive methods. Implant substitution between three years or ARV regimen change may be considered.