Hormones and ART Interactions

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Case

• BA
• Age 35
• Originally from Senegal
• Diagnosed HIV +ve 2001 in pregnancy
• CD4 at diagnosis 402 cells/µL
• VL 40,000 copies/ml
Treatment

• Started on treatment with ABC/3TC/NFV
• Continued till birth of child, then stopped mid 2002
• CD4 count on stopping 530 cells/µL
• VL <50 copies/mL
What happened next?

• Restarted treatment March 2004 because feeling non-specifically unwell
• CD4 302 cells/µL
• VL 100,000 copies/ml
• ABC/3TC/Kaletra
• Intolerant of Kaletra
Next

• Kaletra switched to NFV
• Continued this till became pregnant again in 2007
• Switched to atazanavir/r
• Took this till end of pregnancy but unhappy with jaundice
• Switched to darunavir/r
Currently

• ABC/3TC/DRV/r

• Tolerating this well

• CD4 650 cells/µL

• VL <20 copies/ml
Social history

• Same man is father of her 2 children; HIV positive; lives abroad; no longer together
• New partner; serious relationship
• Does not want any more children
• Does not want to use condoms
What are her contraceptive options?
Options

• Does not want an intrauterine method

• Does not want Depo-Provera

• Interested in pill and potentially the vaginal ring (CHC)
Combined HC

- Ethinylestradiol (EE) – synthetic oestrogen
- Progestogen – many different kinds
- Pill, patch, ring, (injection)
NuvaRing

- Ethinylestradiol

+ 

- Etonogestrel
Progestogen only contraceptives

Various progestogens derived from progesterone or testosterone

• Pill

• Implant

• Injection
CHC vs POP?
Can she have either of these?
PI interactions

• EE and progesterone metabolized by CYP and glucuronidation
• Darunavir – inhibits CYP
• Ritonavir – inhibits CYP and induces glucuronidation

• CANNOT GIVE CHC WITH THIS
Would you switch her antiretroviral treatment?

What do you need to know?
What do you need to know?

• Wild type virus throughout

• Treatment interruptions for pregnancy and intolerance only

• Health good; no contraindications to combined hormonal contraception
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Options

- Integrase inhibitor – already on Kivexa so could have dolutegravir (Triumeq) or with current constraints Kivexa/raltegravir
- NNRTI – rilpivirine (+ Kivexa - cost); Eviplera (2 switches)
- Atazanavir? (jaundice)
Outcome

• Switched to Triumeq
• Tolerating it well
Tailor HAART to contraception not the other way round!!!

All options should be available to WLHIV
http://www.hiv-druginteractions.org/