Treatment Issues for HIV Positive Women

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Issues

- Women comprise >50% PLWHA
- Natural cohorts - predominantly male cohorts
- Women inadequately represented in randomised clinical trials(lack power to analyse by sex)
- Current studies MTCT>> non-pregnant women
- Women are not men - different psycho-social, physiologic issues
- African?/ women issues

HIV disease progression and gender

- Natural history cohorts : male>female, shorter survival & increased risk of death in females (non-biological factors-differential access)

- Biology - *? Effect on progression, poorly understood*
  - Oestrogens/progestins
  - Menstruation
  - Pregnancy
  - Body mass Index (BMI)

HIV disease progression and gender (II)

- CD4 counts

  baseline counts higher (Prins 1999)

  AIDS at higher CD4 (Maini 1996)

- Viral load

  lower at baseline(5 years);1.6 higher risk of progression for VL(Katzenstein 1996,Farzadegan 1999)

  Viral diversity - HIV1&2, clades ?

  ?Criteria for starting HAART

CD4/VL and progression

- Swiss HIV Cohort
  - no difference in natural progression
- Anastos (2002)- progression from initiation of HAART
  CD4 200>200-350=>350
- Overall – *no difference in progression,*
  ? current guidelines appropriate

Clinical presentations

- Women younger at presentation
- Candida oesophagitis/PCP commonest ADIs (Sha 1995)
- Cervical abnormalities/ Ca. Cervix
- Recurrent candidiasis

Response to therapy

- Females achieve similar(faster) virological responses (Moore2001, Moorcroft 2000)

Adherence

- Sociological factors – childcare, access, poverty. (Asylum/dispersal)

- Psychological – depression, impact of adverse effects (e.g lipodystrophy)

Easier, tolerable regimens

Toxicity(I)

- Overall higher rates of adverse drug reactions in women (25 vs 37%) (Lucas 1999)

- Cutaneous drug reactions

  "Female sex but not ethnicity is a strong predictor of NNRTI induced rash" ***(n=337, females 30.6%, 47.5% black African). Females rash 14.6% risk RR 9.0;. race no effect*** (Mazhude 2002)

  RTV/Indinavir – 5% in low CD4 counts (Floridia 2004)

- Lactic acidosis/hepatomegaly on nucleosides
- Hepatotoxicity - nevirapine
- Bone mineral density?

Toxicity (II)

- Morphologic Alterations(MA) (Galli 2001)
  differing patterns (increased accumulation)
  Female gender assoc. with increased risk of MA (O.R 2.02,p =.001)
  -?Psychological impact/adherence
- Lipid abnormalities
  greater elevations in women
  ??CVS risk
- Less diarrhoea/TG rises with NFV (Pernerstorfer-Schoen 2001)

Contraception

- NNRTIs
  – decrease levels of oestrogen OC
  - EFV teratogenicity? *(women can get pregnant!)*
- PIs
  - >40% decrease AUC ethinyl estradiol
- Options
  IUD?
  Depo Provera/Norplant

Pregnancy

- Women need information pregnancy/sexual health (SHIBAH project)
- Reproductive choices
- Maternal health takes priority
- Resistance assays
- Which ARVs?

The way ahead….

- Clinical trials and women

  pharmacokinetics, physiology
  sex-specific analyses

  HIV viral diversity

- Qualitative studies - access, adherence health beliefs, religion

- Increased female involvement in study design and regulatory approval

Summary

- HIV/AIDS = same disease in men and women

But

Different psychosocial and physiologic factors