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## Toxoplasmosis reactivation following HAART introduction associated with foetal death in a severely immune suppressed HIV-infected woman: an immune reconstitution inflammatory syndrome (IRIS) consequence?

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### Background

Congenital toxoplasmosis usually results from acquired infection in non-immune pregnant woman. Some cases have been described in immunodeficient women, as a result of *Toxoplasma gondii* infection reactivation [1-3]. We report the case of a fetal death probably related to a congenital toxoplasmosis in an HIV infected pregnant woman during immune restoration following HAART initiation.

### Case report

An HIV infection was diagnosed in a 26 years old African pregnant woman at 10 weeks of pregnancy. The CD4 cell count was 7/μl (1%), the HIV viral load was 108,000 cp/ml, and the toxoplasmic serology was positive for IgG (18000 UI/ml) and IgM negative, the retrospective toxoplasma detection by PCR was negative at entry.

HAART consisting in a combination of lopinavir/r and zidovudine plus lamivudine was introduced at 12 weeks of pregnancy resulting in a rapid immune restoration 2 weeks later: At that time the CD4 cell count increased up

to 185/μl (10%) and the plasmatic HIV viral load dropped to 1,222 cp/ml.

A miscarriage occurred 7 weeks after HAART introduction. At this time, toxoplasma PCR was positive in the mother plasma as well as in the amniotic fluid, concomitantly with an anti toxoplasma IgG increase (81,000 UI/ml) and occurrence of anti toxoplasma IgM, amniotic fluid HIV viral load was undetectable. The post-mortem analysis dated the foetus death around 16 weeks of pregnancy that was 4 weeks after the HAART introduction and showed evidence of non specific inflammatory histologic lesions.

### Conclusions

The chronological parallelism between toxoplasmosis reactivation and rapid CD4 cell count increase makes us wonder if this miscarriage case could not be an immune reconstitution inflammatory syndrome manifestation associated with toxoplasmosis reactivation. According to this hypothesis, we should take into account IRIS risk factors in HIV infected pregnant woman when introducing

HAART, not only for the mother but also for a healthy foetal development.

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