

### Experiences in the successful prevention of HIV vertical transmission

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**Background:** Prepartum, intrapartum, and postpartum preventive measures with antiretroviral drugs, appropriate delivery methods, and discouraging breastfeeding significantly decrease the risk of vertical transmission of HIV infection. This study introduces the experience of successful prevention of HIV vertical transmission in a hospital of South Korea. **Methods:** We retrospectively reviewed medical records of 5 infants and their mothers infected by HIV and gave birth at a university hospital of South Korea, between January 2001 and December 2012. Data on maternal status including CD4+ cell counts, viral loads, and antiretroviral treatments were collected. The infant growth status, viral loads and HIV antigen/antibody test results were also analyzed. **Results:** Five HIV-positive mother delivered 5 babies. All mothers received prepartum antiretroviral therapy with 3 drugs. The viral loads in the 3rd trimester were suppressed (<50 copies/mL) in 3 mothers, and median CD4+ cell counts were 284 (147~804). Four mothers underwent cesarean sections and one had a vaginal delivery. Intravenous zidovudine was administered to five mothers during delivery. All babies were taken zidovudine syrup for 6 weeks. We followed up five babies using HIV RT PCR and Anti-HIV1/2 + Ag assay until 18 months, and all the infants were negative for HIV. Among the five infants, one infant had low birth weights. **Conclusions:** We could successfully prevent vertical transmission of HIV using prepartum, intrapartum and postpartum preventive measures.

Table 1. Characteristics of the mothers infected with HIV and delivered infants

	Maternal data					Infant data			
	Age	HIV viral load in 3rd trimester	CD4+ cell count in 3rd trimester	Delivery method	Antiretroviral therapy during pregnancy	Intravenous zidovudine during delivery	Birth weight (gm)	HIV RT-PCR at 18 months	Anti-HIV1/2+Ag at 18 months
Case A	39	14700	147	C-sec	Ritonavir-boosted atazanavir Abacavir Lamivudine	Yes	3190	Not detected	Negative
Case B	30	0	284	C-sec	Ritonavir-boosted atazanavir Zidovudine Lamivudine	Yes	2620	Not detected	Negative
Case C	27	0	723	C-sec	Ritonavir-boosted atazanavir Zidovudine Lamivudine	Yes	3730	Not detected	Negative
Case D	31	0	804	NSVD	Ritonavir-boosted atazanavir Zidovudine Lamivudine	Yes	3020	Not detected	Negative
Case E	31	51700	110	C-sec	Ritonavir-boosted lopinavir Abacavir Lamivudine	Yes	3270	Not detected	Negative

HIV, human immunodeficiency virus; C-sec, cesarian section; NSVD, normal spontaneous vaginal delivery.

### Case of SFTS with leukocytosis due to bacteremia

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**Introduction:** SFTSV is a tick-borne virus, Family Bunyaviridae, Genus phlebovirus, is the causative agent of SFTS, an emerging infectious disease characterized by high fever, gastrointestinal symptoms, leukopenia, thrombocytopenia, and high mortality rate. In general, SFTS is usually accompanied leukocytopenia & thrombocytopenia. We report case of SFTS with leukocytosis. Case On July, 2015, a 51-years old man was visited in our hospital for fever with low blood pressure. He was under the care of a Hepatitis B, hepatitis C and had foley catheter due to severe BPH. When he visited in hospital, vital sign revealed 70/40mm/Hg and body temperature 37.9°C. Laboratory study revealed thrombocytopenia and elevated liver function test, elevated CRP. And he was farmer and had outdoor activity. So, we thought tick-borne disease, such as SFTS and HFRS. In general SFTS accompanied leukocytopenia. We confirmed SFTS through serologic test in our laboratory room. But he continued leukocytosis then 6 days later, his blood culture was brought up E.coli. Conclusion SFTS display characteristics of fever, thrombocytopenia, elevated LFT and leukocytopenia. We described the SFTS 1 case with leukocytosis because of bacteremia. Because SFTS had leukocytopenia, SFTS patients with leukocytosis necessarily evaluate other cause of leukocytosis.