TO STUDY THE PREVALENCE OF HIV INFECTION IN PREGNANT WOMEN AND ITS EFFECT ON PERINATAL OUTCOME

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ABSTRACT: First AIDS case was reported in 1986. In India, 71.4% of all HIV estimated to be women with an accompanying increase in vertical transmission & pediatric HIV(1).The HIV epidemic has penetrated into the general population(2). The transmission may occur late in pregnancy & during delivery(3) & through breast milk(4). **AIMS:** To find out the prevalence of HIV in pregnancy and its effect on perinatal outcome. **METHODS:** A prospective study was conducted in Loni Maharashtra during July 2001– June2003. All the women registered in the antenatal clinic were subjected to Rapid test :comb Aids – RSKit, HIV EIA Comb Test and CAPILLUS Test after counseling and written informed consent according to the PPTCT programme. Positive result of all three tests were taken as confirmed positive result. All Sero-positive women received tab Nevirapine 200 mg single dose in active phase of labour. Babies of all sero-positive women received syrup Nevirapine 2ml/kg body weight within 72 hrs of birth. Statistical analysis was done using chi-square test. **RESULTS:** The prevalence rate of HIV in present study was found to be 1.85%. The relationship of HIV seropositivity with preterm labour (16% VS 7% ,Z=1.97,P<0.05) was statistically significant. The difference in mean birth weight of HIV positive versus HIV negative women was 176 , which is significant statistically. **CONCLUSION:** The HIV prevalence in the present study was found to be 1.85% . Considering the low risk behavior & rural based study population, it appears to be quite high. We can conclude from this study that pregnant women are not at risk of adverse maternal & perinatal outcome.

INTRODUCTION: First AIDS case was reported in 1986. In India, 71.4% of all HIV estimated to be women with an accompanying increase in vertical transmission & pediatric HIV (1).The HIV epidemic has penetrated into the general population (2). The transmission may occur late in pregnancy & during delivery (3) & through breast milk (4).

AIMS:

- To find out the prevalence of HIV in pregnancy.
- To study the effect of HIV on perinatal outcome.
- To provide comprehensive counselling support & to control the vertical transmission of HIV infection.

METHODS: A prospective study was conducted at -Pravara Medical College, Loni Maharashtra during July 2001– June2003. Counselling & written informed consent through prevention of parent to child transmission (PPTCT) programme was done.

A sample of 2cc blood was collected in a plain bulb & subjected for HIV testing as per PPTCT protocol-

ORIGINAL ARTICLE

- 1> Rapid test: combAids – RS kit.
- 2> HIV ELISA Comb Test.
- 3> Capillus Test.

Positive results of all three tests were taken as confirmed positive result.

All Sero-positive woman received tab Nevirapine 200 mg single dose in active phase of labour for prevention of mother to child transmission (MTCT). Babies of all sero-positive women received syrup Nevirapine 2ml/kg body weight prophylactically within 72 hrs of birth.

Statistical analysis was done using chi-square test.

RESULTS:

NO. of ANC REGISTRATION	HIV POSITIVE	%
3550	66	1.85
PREVALENCE OF HIV INFECTION		

The prevalence rate of HIV in present study was found to be 1.85%.

ANTEPARTUM COMPLICATIONS	HIV POSITIVE (n= 50)		HIV NEGATIVE (n=50)	
	No. of cases	%	No. of cases	%
Spontaneous abortion	03	06	05	05
Preterm Labour	08	16	07	07
PROM	02	04	12	12
IUGR	03	06	07	07
IUD	04	08	05	05
PIH	04	08	08	08
ANTEPARTUM COMPLICATION				

The relationship of HIV seropositivity with preterm labour (16% VS 7%, Z=1.97, P<0.05) was statistically significant.

Complications	HIV POSITIVE		HIV NEGATIVE	
	No. of cases	%	No. of cases	%
Puerperal sepsis	0	0	2	2
Wound infections	2	4	6	6
Other medical complications	0	0	0	0
Skin infection	0	0	0	0
Mortality	0	0	0	0
POSTPARTUM COMPLICATION				

ORIGINAL ARTICLE

In 2 cases of caesarean sections in the sero- positive patients, wounds got infected and gaped.

GAPED EPISIOTOMY WOUND

GAPED CESAREAN WOUND

OUTCOME	HIV Positive		HIV Negative	
	No. of cases	%	No. of cases	%
Live births	43/50	86	94/100	94
Full term babies	38/43	88	85/94	90
Preterm babies	08/43	19	07/94	07
Mean birth weight (gm)	2524	--	2700	--
LBW (<2000gms.)	10/43	23	27/94	29
Birth asphyxia	02/43	05	06/94	06
Still births fresh	03/47	06	01/95	01
Macerated	01/47	02	00	00
Neonatal death	03/43	07	06/94	06
Congenital anomaly	01	02	00	00
PERINATAL OUTCOME				

The difference in mean birth weight of HIV positive versus HIV negative women was 176, which is significant statistically.

DISCUSSION: In our study, HIV seroprevalence rate was found to be 1.84% in pregnant women. In India, it ranges from less than 1% to 5.9% (2). Slightly higher rate is reported in other South East Asian Countries like, Thailand (8%) & Myanmar (7%) (5). The efficiency of transmission of HIV from an infected mother to infant ranges from 15% to 25% in developed countries & 25% to 45% in developing countries (6) NACO. Guidelines accessed in 2005.

ORIGINAL ARTICLE

In our study, 16% preterm labour was found in HIV seropositive women as against only 7% in control group. Result of one study showed 22% vs. 12% preterm labour in HIV seropositive women (7).

Complications are more in the HIV positive pregnant women as compared to the HIV negative control group but was not statistically significant (8).

CONCLUSION: The HIV prevalence in the present study was found to be 1.85%. Considering the low risk behavior & rural based study population, it appears to be quite high. We can conclude from this study that pregnant women are not at risk of adverse maternal & perinatal outcome.

REFERENCES:

1. Kuhn et al. AIDS 1997
2. Lal et al., 1995
3. Bertolli J, et al. J Infect Dis 1996
4. Miotti PG et al. JAMA, 1999
5. WHO Regional Health report, 1998
6. NACO. Guidelines accessed in 2005.
7. Bharucha E, et al. Vol. 50 Aug. 2000
8. Howard L. Minkoff, American Journal of Obst & gyn. 1990;163)

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