

## Case report of an HIV positive pregnant mother in Keren Hospital, Eritrea

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### Abstract

A 35 year old HIV positive mother refused to have Caesarian section (C/S) for Cephalo pelvic disproportion and fetal distress claiming her CD4 count was low. Later she agreed to have C/S when the labour was obstructed but requested the staff not to disclose the status of her condition even to her closest family. She delivered a severely asphyxiated baby who died 6 hours after delivery. There was a major misunderstanding with her sister with to aseptic techniques regarding handling her soiled clothing post operatively. She was given ceftriaxone and metronidazol intravenously for seven days. Fortunately the mother was discharged improved, without complication, on the 7th post operative day..

### Introduction

HIV is associated with increased rates of preterm delivery, low birth weight and stillbirth. Special interventions to reduce maternal to child transmission (MTCT) include ARV treatment and prophylaxis, safer delivery procedures and counseling on safe breast feeding 1.

High viral load, low CD4 count, advanced HIV disease, presence of sexually transmitted diseases as well as prolonged labour and delivery specially when associated with chorioaminionitis increase transmission of the infection to the baby 2. The rate of transmission is 17% during pregnancy, 50% during labour and delivery and the remaining 33% during breast feeding 3. Elective CS is best done at 38 weeks especially when the viral load is greater than 1000c/ml 4. The WHO criteria for initiation of ARV therapy in adults are stage IV, stage III with CD4 < 350 c/ml, stage I and 2 when CD4 is < 200c/ml 5. CD4 count typically initially increases by greater than 50 c/ml at four to eight weeks in response to HAART and by an additional 50-to 100 per year thereafter. Family counseling is mandatory when patient is started on ARV treatment 6. A case of an HIV positive pregnant woman is presented here to highlight consequences of departure from recommended practices in the management of labour in HIV positive women.

### Case report

A 35 years old woman diagnosed HIV positive since 2003 married another HIV positive man. She became pregnant and during the fourth month of pregnancy the CD4 decreased to 95. She was started on ZDV 300mg, 3TC 150mg, Nev 20mg and bactrim. Trimol and Nevilast were introduced during the seventh month of pregnancy. At term the woman came in the latent stage of labour on arrival. The woman was seen by the obstetrician 48 hours later while she was still in the early active phase of labour and signs of CPD were promptly confirmed. The woman initially refused C/S but consented to the operation after another 24 hours of delay. C/S was eventually performed but the baby was severely asphyxiated and died after 6 hours while

receiving resuscitation treatment.

### Discussion

The woman only received bactrim prophylaxis even though her CD4count was 198c/ml which warranted ARV treatment according to WHO criteria for. CD4 count increases by greater than 50c/ml at 4-8 weeks and an additional increment of 50-100c/ml per year has been reported following introduction of ARV 5. Commencing ARV through early transfer to an obstetrician may have allowed the postponement of pregnancy and the necessary increase in CD4 count to acceptable minimum levels for sustainable pregnancy. In the event of accidental pregnancy, the obstetrician could have explored the opportunity of discussing elective C/S in the light of CD4 and viral load results.

Adequate counseling, a change of behavior and ARV treatment are critical in successful outcomes among HIV women who become pregnant 5. Family counseling is an absolute requirement at the time of initiation of ARV treatment. Refraining from early rupture of membrane, avoiding repeated vaginal examinations and preventing prolonged labour are other key adjustments to normal practice of assisted delivery to be adapted to HIV positive patients 6. Even though the delay of C/S could have contributed to the death of the neonate the chances of HIV transmission to the baby would have been still higher than after elective C/S done at 37 weeks. C/S done in labour is associated with greater risk of infection, to alleviate the high risks of infection mother was given expensive antibiotics as treatment 7. The mother's wound healed within seven days of operation. This implies that C/S may not be as an absolute a contraindication for low CD4 patients 8. Some studies reported that the risks of C/S to women with low CD4, and the baby are slight.

The need for comprehensive individual and family counseling for pregnant women with HIV cannot be over emphasized this case clearly demonstrates. The woman asked the staff as well as the counselor not to disclose her HIV status even to the closest family. Immediately after C/S she even prevented her own sister from using protective clothing such as gloves when handling her soiled clothing until the health workers intervened. Instead of understanding the

plight of her condition and the risk she posed to her sisters, paradoxically she laughed, in our culture, she said, relatives and neighbors have to take care of the mother with bare hands. She added that there is no problem with \*gual mariam\*(delivered mother) reflecting a total distortion of the prevailing situation in this HIV era.

In concluding it is clear that the pregnant woman should have been started on ARV as soon as her CD4 count was 198. Consultation of the obstetrician prior to pregnancy was paramount. The specialist could have advised her on postponing pregnancy till the CD4 count was at a higher level. Advice on elective C/S at term could have saved baby. Family counseling should be part and parcel when ARV treatment was initiated.

#### References

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