Postpartum Antiretroviral Prophylaxis withZidovudine, Lamivudine, and Nevirapine during Intrapartum HIV Infection

Dear Editor,

I read the case presentation by Dr. Ahu Kara et al. (1) titled "*Postpartum Antiretroviral Prophylaxis with Zidovudine, Lamivudine, and Nevirapine during Intrapartum HIV Infection"* with interest. However, I am of the opinion that there are some issues mentioned in the case presentation that need to be discussed.

It was stated by the authors in the case presentation that the mother did not receive any treatment for the HIV infection and did not receive continuous intravenous zidovudine infusion during or before birth. It is stated in the case presentation that "it was learnt that the mother of the patient was under treatment due to HIV infection in an epicenter". Even though it was specified in the discussion part that the mother did not receive antiretroviral treatment, due to the mention of this statement in the case presentation, we get the impression that the reason of this statement in the case presentation was that the mother had the diagnosis of HIV positivity and was followed up through treatment. Clarification of this issue will enable an evaluation of the approach that is applied to the case.

If the diagnosis HIV positivity was known before the mother's pregnancy, but the treatment had not started due to the failure of treatment onset criteria, in all current HIV guidelines, as it was certainly stated that the pregnancy had the indication of onset of treatment, the authors should have discussed this issue as well (2-4).

During pregnancy, the most important determinant in the management of prophylaxis for the baby, considering that the mother has a viral load, we would, without doubt, expect Dr. Kara to explain this issue. If the mother's viral load is known to be negative, considering suggested guidelines for normal birth (3), the triple prophylaxis applied to the patient in this case will be inevitable due to the risk of undesirable effects.

However, while oral zidovudine is recommended for the infants with HIV infection, during pregnancy regardless of antiretroviral treatment of the mother received for 6 weeks in the United States of America, 4 week-prophylaxis is recommended in the United Kingdom and many European countries (3). In this respect, I would expect the treatment protocol to be discussed by the authors.

Another point is that in the current guidelines the following recommendation is made; if the mother did not receive any antiretroviral treatment before the birth, but only took intrapartum or did not receive any antepartum or intrapartum antiretroviral regimen, after neonatal exposure, binary prophylaxis (zidovudine + nevirapine) should be taken (2). In double or triple antiretroviral regimes, the rate of HIV transmission from mother to infant is lower than zidovudine and is recommended for prophylaxis. In the binary regimes, in the first week of the newborn, the 3-doses of nevirapine (at birth, 48 hours after the first dose, and 96 hours after the second dose) are recommended. Nevirapin: if the birth weight is 1.5- 2 kg, for each dose, 8 mg, if it is >2kg, for each dose, 12 mg. For six weeks, zidovudine and nevirapine combination is an effective regimen and triple zidovudine is less toxic as compared to the lamivudine and nelfinavir combination. Also have triple the superiority of a dual regime, the regime has not been demonstrated Moreover, the superiority of a dual regime over the triple regime has not been demonstrated.

In the guidelines Published in our country by the Ministry of Health for the diagnosis and treatment of HIV / AIDS, as is clearly stated, the follow-up of HIV-positive newborn mothers should be done at regular intervals as shown in the other guidelines. It can be seen in the follow-up cases of Dr. Kara that there are shortcomings in this regard. In order to monitor the drug compliance of the mother and baby and evaluate the possible zidovudine-related anemia in infants, they are called for control at 2 to 4-week intervals to check the baby. In order to evaluate zidovudine toxicity, a complete blood count is suitable to be performed every 1-3 months. It is recommended that virological diagnostic tests of infants with HIV exposure are performed when the infant is 14 and 21 days old, 1 and 2 months old and 4 and 6 months old. In infants with two negative HIV PCR DNAs or with a result of RNA, many clinicians confirm that antibodies against HIV in the 12 and 24 months turn to negative (5-7).

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DOI: 10.5152/ced.2015.15

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Dear Editor,

First of all, we would like to thank you for the evaluation of Dr. Ateş Kara on our article (1) titled *"Postpartum Antiretroviral Prophylaxis with Zidovudine, Lamivudine, and Nevirapine during Intrapartum HIV Infection"* published in your journal. We want to emphasize that the mother of the patient who was given postpartum antiretroviral prophylaxis was diagnosed with HIV infection at the epicenter, but failed to comply with the antiretroviral therapy due to her social-economic status and was a mother who delayed the treatment and was not followed up. Therefore, it was learnt that during the normal spontaneous vaginal birth she had at a private health center, she did not receive any treatment neither before the birth nor during the birth. In fact, the fact that the mother of the patient died of AIDS and AIDS-associated opportunistic infections nearly 6 months after the birth leads us to think that the HIV infections was out of control. Since the mother was not followed up, we have no tests available for the mother's viral load tests.

Especially the neonates who are risky of in terms of HIV transition, whose mother only received intrapartum antiretroviral medication (level of evidence AI) or who did not take antiretroviral drugs antepartum or intrapartum (level of evidence AI) or who took suboptimal antepartum antiretroviral medications and whose viral suppression was suboptimal (>1000 copies/mL) are recommended, in addition to the zidovudine therapy within the first 6 weeks, nevirapine therapy for three doses (at birth, 48 hours after the first dose, and 96 hours after the second dose) in the first week and in a way that starts immediately after birth (2). Moreover, in the same guideline recommendations last updated on August 2015, although triple antiretroviral drugs are recommended in the high-risk infants by some experts, as it was stated by Prof. Dr. Ateş Kara, the superiority of triple regime failed to be proven over the dual regime. However, it was stated in the referred guidelines that the decision of triple antiretroviral treatment could be initiated provided that the potential risks and the benefits of treatment to the patient were explained to the family (level of evidence BIII) (2). While evaluating the antiretroviral drug options of the patient, although it was not mentioned in our study, since the patient's social-economic level was low, and she had non-followed up pregnancy and was non-followed patient, those drug were initiated considering the risks likely to develop in the patient. Furthermore, the fact that our patient was born with normal spontaneous vaginal delivery route has also increased the risk. For this reason, in the first encounter with the patient, considering the patient's family history and delivery, triple antiretroviral treatment was chosen. It should be remembered that the retroviral treatment composed of three regimes was only initiated specific to this patient; zidovudine prophylaxis is applied in cases with low risk in our clinic (3, 4).

In our case, in compliance with the HIV / AIDS diagnosis and treatment guidelines published by the Ministry of Health in our country, the follow-up of infants with a HIV positive mother was carried out at regular intervals as indicated in the other guidelines. Care of the patient after birth was carried out with the efforts of our clinic and in consultation with the social services, by the Child Protection Agency due to the mother's potential of noncooperation. Considering the length of the text case presentation of our patient's follow-up, in the subsequent follow-up of the patient, the follow-ups and examinations were not specified in detail in terms of possible side effects. The perinatal suggested in the guidelines in the neonates with HIV-contact was performed on the 14-21 days, 1-2 months and 4-6 months and virology diagnosis tests were also done in our patient and found as negative; but, the last viral PCR results of our patient were given to the patient in writing (5). Furthermore, the exclusion of HIV diagnosis in the neonates who did not get breast milk, the two negative virology tests done firstly after the first month and then after the fourth month or in patients who are 6 months old or older, two negative HIV antibody tests are performed (AII). In addition to the tests performed at these intervals, although it was not indicated, HIV PCR was performed in the 15th month as well and it was mentioned in the case presentation. Our patient is now 3 years old, healthy and regularly followed up by us (Antibodies against HIV are monitored in a negative way). We would like to thank respectable Dr. Ateş Kara for his invaluable contributions.

Best regards,

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Seasonal Prevalence of Acute Gastroenteritis, Enteric Adenovirus and Rotavirus Antigen: Immunochromatographic Presence in Children

Dear Editor,

Diarrhea in children is the most common viral cause. Rotavirus is responsible for the significant part of viral-originated diarrhea. Infection is mainly transmitted through fecal route and children under two years of age are affected more. Majority part of children under two years of age are treated on impatient basis (1). We read the article with interest titled *"Seasonal Prevalence of Acute Gastroenteritis, Enteric Adenovirus and Rotavirus Antigen: Immunochromatographic Presence in Children"* by Sugeçti et al. (2) regarding the rotavirus gastroenteritis which constitutes the significant part of patient load in hospitals, especially pediatric emergency services.

The use of a test with sensitivity and specificity for the detection of antibodies in their study increased the reliability of the results of the internal quality control test kit by using a rotavirus and enteric adenovirus antigens positive control antibodies on each test. We would like to thank the authors for explicating in detail the working method of the test in the method and materials section.

It is commonly known that rotavirus infections in mild climate are more frequently seen in winter months. In undeveloped countries with a tropical climate, on the other hand, although they are somewhat on the increase in the winter months, they may be seen throughout the whole year. In a comprehensive study in Turkey where the data of 35 hospitals were evaluated, it was revealed that rotavirus gastroenteritis was seen all year long, but frequency of the cases increased in January and May. It was found in the same study that the number of cases in summer months were lower (3). Frequency of rotavirus-originated diarrhea may change according to regional and seasonal characteristics. Sugeçti et al. stated in their study that rotavirus antibody positive cases were most frequent in the spring months. This result is consistent with the results of two studies done in the Black Sea coastal provinces (4, 5). In Sugeçti et al.'s study, the frequency of cases (17.24%) with positive rotavirus antibody was noticeable in summer months (27.43%) especially in August. These results seem to be inconsistent with the single-center and multicenter studies done in our country (1, 3-5). Can this specific result be explained by the relative increase in the abundance of diarrhea cases in summer months? In the results part of the study, no information was available regarding the rate of rotavirus antibody positivity in the stool samples especially in summer months. Furthermore, in the discussion part, it was seen that no interpretation has been made regarding the specific abundance of the rotavirus antibody positivity frequency in August. We are curious to know the interpretations of the authors regarding this particular result.

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