Management of Exposure to Tuberculosis in Postnatal ward – Experience from a Regional Hospital

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Introduction
A pregnant lady delivered a preterm baby of 29 weeks gestation in March, 2015. The baby required neonatal intensive care after delivery because of prematurity. The mother was found to have symptoms of cough, low grade fever and shortness of breath at the time of admission, investigations confirmed that she was suffering from Pulmonary Tuberculosis (TB). She was then transferred to isolation ward from the postnatal ward after the diagnosis was made.

Objectives
Enquiry and investigation were carried out regarding those mothers and babies staying in the same postnatal ward. Eight babies were identified as cases of close contact who stayed in the same cubicle with the index case. Parents were interviewed by an Obstetrician and a Paediatrician. The discussions include i) the risk of their babies being infected; ii) the need of oral Isoniazid prophylaxis; iii) the potential side effects of oral Isoniazid (INH); iv) the follow up plan. Two parents agreed their babies to receive Isoniazid treatment as prophylaxis.

Methodology
At three months of age, Mantoux test and CXR were performed in all eight babies. All eight CXR were normal. Mantoux reactions were negative in the six babies: four babies without Isoniazid prophylaxis; two babies with Isoniazid prophylaxis. Isoniazid prophylaxis was stopped subsequently. However, two babies showed positive Mantoux reaction though their CXR were normal. They were classified as suffering from Latent TB infection. Interferon Gamma Releasing Assay for Tuberculosis was then ordered and the test results were negative in these two babies at three months of age. These two babies were given oral Isoniazid for 6 months. Their subsequent CXR were also normal so Isoniazid was stopped.

Result
We have presented our experience in managing the cohort of eight babies with close
contact with Pulmonary Tuberculosis after birth, their evaluation results and subsequent follow up outcomes. Prompt isolation of the index patient and proper management of the exposed infants are essential to prevent the spread of the infection.