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SCIENTIFIC LETTER

Giant Cystic Meconium Peritonitis: A Rare Presentation of Congenital Tuberculosis

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To the Editor: A 34-wk preterm male neonate, with a birth weight 2.612 kg, born to a 27-y-old, 3rd gravida, antenatally showing polyhydramnios and fetal ascites, was referred to us immediately after delivery for severe abdominal distention. Mother was diagnosed case of cervical tubercular lymphadenitis since 20 wk of current pregnancy, for which she was taking Antitubercular treatment (ATT) with good compliance. At birth baby was hemodynamically stable with gross abdominal distention.

X-ray erect abdomen was suggestive of pneumoperitoneum. Initially gastric lavage for acid fast bacilli (AFB) and CB-NAAT were negative. Chest X-ray was normal and liver morphology was normal on ultrasound. Placenta was not available for examination as it was transferred ex-utero to our facility. Exploratory laparotomy was done, which showed giant cystic cavity with meconium peritonitis and terminal ileum perforation with adhesions. Terminal ileum, cystic cavity and proximal colon were excised in toto and end-to-end anastomosis performed. Later feeds were initiated after 5 d and full feeds were established by day 10. Histopathological examination (HPE) of the specimen showed meconium peritonitis, serositis and reduplication cyst. There were no granulomas in HPE. The tissue specimen comprising of cyst wall was subjected to DNA based genetic testing for tuberculosis (TB) using GenoType MTBDRplus VER 2.0 kit. The test showed positive result for *Mycobacterium tuberculosis*, sensitive to Rifampicin and Isoniazid. This test has sensitivity of 96.4% and specificity of 100%; however as with any DNA detection method, the DNA recovered may be from viable or non-viable bacteria [1, 2].

Baby was started on 4 drug ATT regimen (2HRZE/4HR) as per RNTCP guidelines. Baby was discharged successfully on day 14 of life. On follow-up baby is thriving well, weighing 6.520 kg at 5 mo.

Our case meets Cantwell's criteria for diagnosis of congenital TB as the primary focus was in abdomen, proved by gene study within 1 week of life, with a history of TB in mother [3]. TB demonstrated an approximately two-fold risk of prematurity as happened in our case [4]. Signs and symptoms of congenital TB are usually non-specific and include respiratory distress, fever and hepatosplenomegaly [4, 5]. Our case presented with abdominal signs. TB is known to clinically present in varied forms and pose diagnostic challenges. To our knowledge this is first case report of Giant Cystic Meconium Peritonitis caused by intestinal perforation due to Congenital TB.

Compliance with Ethical Standards

Conflict of Interest None.

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