

Initial six month's study of neonatal COVID-19 in a tertiary care hospital of Bangladesh

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Background:

COVID-19 has become global pandemic affecting mainly adult with serious devastating effect in some cases. It is less common in children and rare in neonate. But to date with increasing surveillances number of neonates with COVID -19 are increasing.

Objective:

The aim of study was to determine the COVID -19 in neonates so that we can give proper emphasis on neonatal COVID-19.

Methods:

This cross- sectional study was conducted from April 2020 to September 2020 at Dhaka Shishu (Children) Hospital in Bangladesh. Neonates with suspected COVID-19 were tested for SARS-CoV-2 virus by RT- PCR. Data were collected and analyzed by SPSS version 26.

Results:

Forty three cases were COVID-19. Twenty eight (65.1%) cases were male and 15(34.9%) females. Eleven (25.5%) cases were positive for SARS -CoV-2 virus by RT- PCR within 3 days, among them 5 (11.6%) cases were within 24 hours of age. Nine (20.9%) and 23(53.5%) cases were test positive at day 4 - 7 and 8 - 28 days respectively. The main symptoms at admission were respiratory difficulty (12, 27.9%), fever (8,18.6%), convulsion (8, 18.6%) and reluctance to feed (7, 16.6%). In neonate two or more diseases coexist in same cases. Sepsis was present in 20 (46.5%) cases with COVID-19. Perinatal asphyxia was present in 10(23.3%) and pneumonia in 8 (18.6%) cases. In laboratory findings low Hb% was present in 2/43(4.7%) cases, leukopenia in 4/43(9.3%), leukocytosis in 2/43(4.7%) and thrombocytopenia in 5/43(11.6%). Elevated CRP was present in 14/29 (32.6%) cases, and prolonged PT, aPTT in 2/2(100%). No organism was found in blood C/S. In chest X-ray, one showed patchy opacities in right lower lobe, another showed bilateral ground-glass opacity and third one revealed few patchy opacities in the right perihilar region. Eight (18.6%) cases died including one surgical case.

Conclusion:

A significant number (43) of COVID-19 cases was found in this study. In neonates the clinical features could not be differentiated properly between COVID-19 or associated diseases unlike children and adult. The neonate may be a source of transmission of this disease. So, we should give proper emphasis on test, tracing and management of neonatal COVID-19.

Biography of Dr. Maksudur Rahman

Dr Maksudur Rahman obtained MBBS, DCH (Diploma in child Health), FCPS (Paediatrics) and MD (Neonatology) degree. He successfully completed the attendance of "Short course on International Child Health" at Melbourne University, Australia.

Dr Maksudur Rahman has authored many journals published in national and international journals. He attended as a delegate in many conferences in Australia, Thailand, India etc.

He involves many governments and non government organization. He was the team supervisors of KMC (Kangaroo Mother care) project collaborated with WHO, DGHS and Dhaka Shishu Hospital that was the first institutional project on KMC in Bangladesh.

Dr Maksudur Rahman has been honoured as an Author of Paediatrics By BPA (Bangladesh Paediatric Association) in 2011. He is author of four books previously published in English and Bangali.. He is peer reviewer and member of executive committee of national and international Journal. He notified tramadol suppository poisoning in children in Bangladesh which was first published article (so far we know) in the world.

Now he is working as an Associate Professor at Neonatology Department in Dhaka Shishu (children) Hospital Bangladesh.