Conclusions It can masquerade as sepsis, acute abdomen and acute renal failure. A high index of suspicion is needed for early diagnosis as management is simple with good prognosis.

British Association of Perinatal Medicine and Neonatal Society

1593 VERTICAL TRANSMISSION OF COVID 19

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10.1136/archdischild-2021-rcpch.737

Background Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) and its pandemic disease have provided unprecedented challenges to medical treatment. To date there has been little definitive evidence of vertical transmission of SARS-CoV-2 from mothers to foetuses/neonates during pregnancy and delivery. There is biological plausibility for in-utero infection of the foetus with SARS-CoV-2 virus as the virus has previously been demonstrated in placenta and amniotic fluid. Goh et al's meta-analysis reports the pooled incidence of vertical transmission as 16 per 1000 newborns.

Objectives To describe cases of Covid-19 with a very high probability of vertical transmission in a large tertiary NICU in United Kingdom

Methods Babies born to Covid positive mothers, who require NICU admission at St. Mary's Hospital, Manchester, receive their initial care in an isolation room within NICU, where all levels of neonatal care (intensive, high dependency or special care) can be provided. Following admission to the NICU isolation room, babies have a nasopharyngeal (NP) swab taken on day 1, 3 and 5 of life. The sample on day 5 is sent for rapid analysis (usually returning a result within 4 hours). If all NP swab results are all negative, the baby is moved from the isolation room on day 5 of life. Conversely, if any swabs are SARS-CoV2 positive, the baby remains in the isolation room for 14 days. We report the characteristics and clinical courses of the cases where any of baby's swabs samples tested positive for SARS-CoV-2.

Results All three babies were admitted directly to the NICU isolation room immediately after birth without physical contact with their respective parents. All hospital staff caring for the babies used full personal protective equipment including a filtering facepiece (FFP) 3 mask, gloves and apron. Reverse transcriptase polymerase chain reaction (RT-PCR) testing of the nasopharyngeal swab detected the SARS-CoV-2 virus. Indeterminate results are presumed positive with sub reportable

thresholds of viral loads. Table 1 summarises the characteristics of cases, their respective parental physical contact and first day of receiving expressed breast milk (EBM).

Two out of three babies received EBM whilst under NICU isolation. Both of these babies had indeterminate SARS-CoV2 levels, prior to the administration of EBM, therefore we do not believe breast-milk to have been the route of transmission. Fortunately, all neonatal infections with COVID-19 in these cases were mild or clinically insignificant. None of these babies were symptomatic of Covid 19 respiratory infection, although some did required respiratory support but this was in keeping with their underlying condition.

Conclusions From our single tertiary centre experience, we hypothesise that vertical transmission of COVID-19 is highly probable.

Quality Improvement and Patient Safety

1594 QI- PROMOTING TEAM BUILDING, TEACHING AND QUALITY IMPROVEMENT DURING PANDEMIC TIMES THROUGH DEPARTMENTAL TRAINEE-LED TEACHING SESSIONS

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10.1136/archdischild-2021-rcpch.738

Background We had an exciting start to our placement in Paediatric Intensive Care Unit (PICU). However, as part of the weekly plan, we did not have a dedicated session where trainees (from different specialties e.g. paediatrics, intensive care and emergency medicine), could deliver teaching. It was also felt that due to more out of hour shifts on the Covid rota, trainees had felt isolated in work and did not develop a sense of team spirit. This led to the idea of promoting trainee-led weekly teaching sessions with the multiple aims of improving teaching, improving team building amongst colleagues and obtaining work-based assessments in the consultant-supervised teaching sessions.

Objectives Our main aims were

1. to improve interaction amongst the peers
2. to promote learning from each other during these teaching sessions
3. to obtain work-based assessments through these consultant-supervised teaching sessions.

Methods After confirmation that trainees were interested, our next step was to ensure that the consultants would engage in

Abstract 1593 Table 1

	Gestation (Weeks)	Birth Weight	Main Diagnosis	Day 1 Swab	Day 3 Swab	Day 5 Swab	Other positive swabs	First day of EBM	First day of physical contact with parents
Case 1	34+5	3032g	Cyanotic congenital heart disease	Indeterminate	Positive	Positive	D18, D25	Day 2	Day 10
Case 2	37	2980g	Hypoxic ischaemic encephalopathy	Negative	Negative	Positive	D12	Day 7	Day 7
Case 3	32+5	1794g	Surfactant deficient lung disease	Indeterminate	Indeterminate	Indeterminate	D9, D12	Day 2	Day 6