Results Nighty-seven subjects completed this study, and 33 (34%) had active physician-diagnosed eczema at 12 months. Twenty-six out of 81 (32%) subjects showed positive in SPT. Eighteen was classified as atopic eczema patients, while 12 were classified as non-atopic eczema patients. During the study period in total 297 skin swab samples were collected. Alpha diversity represented by Shannon ($p=0.001$) and Simpson ($p=0.004$) indices significantly increased from 1 month to 6 months age, and beta diversity ($p=0.001$) differed across time as well. Relative abundance of Staphylococcus ($p<0.001$ and 0.04 respectively) and Corynebacterium ($p<0.001$ and <0.001 respectively) progressively decreased across time (adjusted p-value: 1 month to 6 months vs 6 months to 12 months). Alpha diversity of skin microbiome at 12 months was significantly lower in atopic eczema patients than that in non-atopic eczema patients (Shannon $p=0.002$, Simpson $p=0.001$). Alpha diversity at 1 month and 6 months did not show significant differences among groups. Differences regarding beta diversity and taxa abundance were not found between atopic and non-atopic eczema patients across time.

Conclusions Skin microbiome profiles differ slightly between infantile eczema with and without atopy. Alpha diversity of skin microbiota at left antecubital fossa is lower in atopic eczema patients compared with that of non-atopic eczema patients only during flare-ups at 12 months. This study cannot detect such difference at earlier time points.

369 KNOWLEDGE AND AWARENESS OF AUTISM SPECTRUM DISORDER AMONG PAEDIATRICIANS AND PRIMARY HEALTHCARE PROFESSIONALS IN SINGAPORE

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Background Autism Spectrum Disorder (ASD) is on the rise globally and is the leading cause of disease burden in children between the ages of 0 and 14 years in Singapore. Early identification of ASD is vital for timely referrals to specialists for early intervention which confers a better prognosis. Barriers that contribute to the delayed diagnosis of ASD include inadequate knowledge and inaccurate beliefs about ASD among healthcare professionals. Surveys on ASD awareness among medical professionals date back to the 1980s and have shown that ASD is an often-misunderstood condition with misperceptions about clinical features prognosis, and management.

Objectives This study aims to evaluate the awareness of ASD among Paediatricians and other healthcare professionals in Singapore, and to identify gaps in their knowledge that could impede early diagnosis and intervention for ASD.

Methods Healthcare professionals from various institutions were recruited to participate in this study. A survey was conducted online via Google Forms and comprised questions on demographic information, perception and knowledge of ASD.

Results Of 181 healthcare professionals who completed the survey, 89% worked with preschool children regularly. Yet only 43.7% felt confident in identifying signs of ASD, and only 27.1% had undergone previous training on ASD. Only 8.3% correctly identified all four early warning signs of ASD. Although 97.2% felt it was necessary to refer children with suspected ASD to specialists, only 49.7% would refer immediately, with 31.5% still practicing a 'watch and wait' approach. Some professional groups were more likely to believe in alternative therapies for ASD than others.

Conclusions Results of study show that many Paediatricians and primary healthcare professionals in Singapore still lack the ability to correctly identify early warning signs of ASD. Furthermore, misconceptions about 'outgrowing ASD' along with the misunderstandings on the communicative and cognitive abilities of children with ASD seem little different from earlier surveys dating back to the 1980s. In addition, more than half (73%) of our survey respondents had not received prior training on ASD, which could explain the gap in knowledge of ASD. In order to bridge the gap in knowledge and to raise awareness of ASD among healthcare professionals, more clinical forums and workshops should be held. Keeping abreast with child development and common neurodevelopmental disorders should be an important part of our Continued Medical Education (CME) efforts as members of the healthcare community here in Singapore.

370 CYTOKINE STORM IN PRETERM NEWBORNS, BORN TO COVID 19 POSITIVE MOTHERS, THEIR PRESENTATIONS, MANAGEMENT AND OUTCOMES IN A TERTIARY CARE CENTRE IN GUWAHATI

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Background Novel corona virus disease is caused by SARS-COV-2 virus. The consequences of this disease is largely unknown in neonates, specifically in Preterm newborns. Though Cytokine storm is an extremely dangerous event, it is treatable if diagnosed in proper time.

Objectives Our aim of the study is to discuss the events that the two newborn babies born to covid 19 positive mothers, went through during their cytokine storm due to transplacentally transferred covid IgG ; their treatment and outcome.

Methods Two Preterm newborn babies- one of them was very low birth weight (VLBW) baby (birth weight 1.25 kg), delivered at 32 weeks in November 2020 to a covid 19 (RT-PCR) positive mother with preeclampsia and PROM; and another appropriate for gestational age (AGA) baby (birth weight 2.5 kg) born at 33 weeks in December 2020 to a mother who was covid RT-PCR positive at 2nd trimester of pregnancy with GDM and PROM more than 24 hrs are discussed here.

The 1st baby had severe birth asphyxia, MSL and respiratory distress soon after birth with SPO2 in room air was 70%-80%. She was treated with nasal prong CPAP with PEEP 5, iv antibiotics, caffeine citrate, iv fluid and supportives. All Blood reports were within normal limit and blood C/S showed no growth and covid RT-PCR was negative. At day 3 of life baby started having frequent episodes of apnoea, desaturation, tachycardia and shallow breathing. As the mother was covid 19 positive; inflammatory markers were checked which revealed IL6-4318 pg/ml, d Dimer -1450, Ferritin-514.6 ng/ml, LDH-687, procalcitonin >100 ng/ml, Trop I-119.9 ng/L, NTproBNP-1008, platelet counts- 55×10^3/uL, PT-18.0 secs INR-1.341, APTT-48.9 secs and covid IgG- 3.48 with B/L opacity on CXRay. The mother also found to have covid IgG -3.48 at the same time. Accordingly iv steroids and IVIg was started along with SC LMWH. The child responded to treatment well and started tolerating feeds and gaining weight.