lower, than in the CG – 10.1 [7.4–16.6] ng/ml (p>0.05); IL-1β content – 23.7 [12.4–45.6] pg/ml and 8.5 [3.3–46.0] pg/ml respectively (p<0.05); IL-6 level - 84.4 [49.6–194.6] pg/ml and 26.5 [11.2–79.2] pg/ml respectively (p<0.001). In women with obesity, 45 (83.3%) children were mature, 9 (16.7%) – premature. Mean gestational age of mature newborns – 38.4±0.2 weeks, premature - 33.8±0.6 weeks (p<0.001). Body weight of mature children was 3,680.0 [2,958.0–4,040.0] grams, premature - 2,000.0 [1525–2065] grams (p<0.001). Median level of 25(OH)D in mature newborns - 8.8 [4.0–14.6] ng/ml, in premature - 4.0 [3.9–4.5] ng/ml (p<0.01); IL-1β - 20.4 [11.2–34.0] pg/ml and 38.1 [32.0–93.8] pg/ml respectively (p<0.01); IL-6 - 84.6 [56.6–166.8] pg/ml, versus 64.6 [32.0–161.6] pg/ml (p<0.05). In mothers with obesity, 14 (25.9%) newborns had intrauterine infection, calcidiol level was 6.4 [4.0–13.4] ng/ml; IL-1β - 17.4 [9.2–23.9] pg/ml; IL-6 - 92.8 [45.6–190.6] pg/ml, which is 3.5 times higher, than in the CG (p<0.01). Conclusions The vast majority of newborns, born by mothers with obesity, had hypovitaminosis D, these children also had conclusively high level of IL-1β and IL-6. In newborns with intrauterine infection, IL-1β and IL-6 content reaches the highest level versus the CG.

**GP242 Early onset sepsis in extramural hospital of Myanmar (Burma)**

Kyi San Thi*, Zaw Win Moe, Khin Nyo Thein. 1Yankin Children Hospital, Yangon, Myanmar; 2Yankin Children Hospital, Yangon, Myanmar

10.1136/archdischild-2019-epa.301

**Introduction** Early onset neonatal sepsis is the important cause of neonatal morbidity and mortality. Better understanding of early onset neonatal sepsis in outborn neonates is required for better management and prevention especially in developing countries.

**Aim** The aim of this study was to study the early onset neonatal sepsis in Yankin Children Hospital, an outborn neonatal intensive care unit of Myanmar.

**Methods** In this hospital based cross-sectional descriptive study, ninety eight neonates with signs and symptoms of sepsis admitted within 72 hours of age were enrolled and after taking informed consent, blood samples for septic screen and blood culture were taken. Standard data collection form was used to collect all demographic data and clinical characteristics of neonates. Bacterial isolates were identified using BacT/ALERT system, and their resistance patterns were studied. Statistical analysis was done with SPSS version 16.0.

**Results** Ninety eight neonates with clinically suspected early onset sepsis were enrolled. Among them, 55 infants were diagnosed as early onset neonatal sepsis(56.1%) and these 55 infants were studied in this research. Pathogens were isolated in 22 infants (40%). PROM (45.5%), multiple vaginal examinations (60%), low birth weight (43.6%) and prematurity (49.1%), were common risk factors for early onset neonatal sepsis. Reduced feeding ability (92.7%) and respiratory distress (80%) were common clinical presentations. Blood culture was positive in 40% (22/55) of infants with early onset sepsis, respectively. Staphylococcus aureus (41%) and Escherichia coli (23%) were common organisms. Case fatality rate was 22% (12/55).

**Conclusion** Staphylococcus aureus was the commonest organism in infants with early onset neonatal sepsis in this study which highlighted that the antibiotics given in early onset sepsis should be effective to tackle that pathogen. The organisms isolated were resistant to commonly used antibiotics like penicillin and sensitive to antibiotics like levofloxacin, amikacin and imipenem. The mortality rate of early onset neonatal sepsis in the present study was 22% which was needed to be reduced by preventive strategies, early diagnosis and prompt and effective treatment.