

## FCO3

**NEONATAL SEPSIS CAUSED BY ENTEROBACTER AMNIGENUS**

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Isolation of *Enterobacter amnigenus* from a human source is extremely rare. We report for the first time in literature the isolation of *Enterobacter amnigenus* from the blood of 5 premature infants. Characteristics of the patients are presented in the table. First 4 patients were parts of quintuplets pregnancy, the fifth sibling was not symptomatic and her cultures were negative. All the infants had signs and symptoms of sepsis, which prompted comprehensive investigations and treatment with antibiotics and supportive measures, one of the quintuplets was asymptomatic. All had umbilical catheters and were on mechanical ventilation. *Enterobacter amnigenus* was isolated from both the aerobic and anaerobic blood culture bottles in 8 occasions. Repeated blood culture from three patients grew again *Enterobacter amnigenus* while they were on antibiotics. Cultures from other sites including urine, cerebrospinal fluid, stool and endotracheal tube were negative in all patients.

| Patient | Gestation (w) | B.W. (Gm) | Age (day) | Symptoms | Antibiotics* | Blood transfusion |
|---------|---------------|-----------|-----------|----------|--------------|-------------------|
| 1       | 28            | 1000      | 11        | yes      | 2, 3         | yes               |
| 2       | 28            | 1100      | 9         | yes      | 2, 3         | no                |
|         |               |           | 16        | yes      | 2, 4         |                   |
| 3       | 28            | 1020      | 9         | yes      | 2, 3         | yes               |
| 4       | 28            | 1040      | 14        | yes      | 2, 3         | yes               |
|         |               |           | 19        | yes      | 2, 4         |                   |
| 5       | 29            | 880       | 47        | yes      | 1            | no                |
|         |               |           | 49        | yes      | 1, 2         |                   |

\* Ampicillin (1), Amikacin (2), Cefotaxime (3), Imipenem (4).

After the cultures were taken, the patients were initially given cefotaxime and amikacin intravenously (n=4), and 1 patient ampicillin and amikacin. Three patients continued to be symptomatic and repeated blood cultures grew *Enterobacter amnigenus* again. Imipenem was given instead of cefotaxime (n=2) and repeated blood cultures were negative. MICs studies were performed on the isolates. All patients survived. In spite of extensive epidemiological investigations we could not identify the initial source of infection except that three of the patients had been transfused with packed RBCs taken from one blood bag. A sample of that blood was not available for culture. We conclude that *Enterobacter amnigenus* can cause neonatal sepsis, and aggressive treatment with the appropriate antibiotics and supportive measures are required.

## FCO4

**HIGH INCIDENCE OF LONG BONES DYSPLASIA IN NEWBORN INFANTS IN QATAR**

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**Background and Objectives:** Dysplastic/ absent long bones (DALB) is a rare congenital anomaly. Absent radius and ulna incidence has been reported as 1/50,000 to 1/100,000 newborns. Several infants had been admitted to our newborn services in the last several years. We wanted to define the epidemiological characteristics of the newborns and their mothers with congenital missing long bones.

**Setting:** Women's Hospital, Doha, Qatar. The only women's hospital in Qatar where about 98% of all pregnancies are delivered.

**Methods:** We reviewed the records of birth and the Neonatal Intensive and Intermediate Care Units admission books in the last 6 years, 1988-1994 for infants who had documented DALB.

**Results :** Total number of live born infants in the study period was about 90,000 infants. We were able

to identify and review the medical records of 13 infants with DALB. Radius was dysplastic / absent in 9 cases (1/10,000), and ulna was dysplastic / absent in 5 cases (1/18,000), tibia and fibula both were absent in 2 patients (1/ 45,000), femur and humerus were absent in one patient each (1/90,000). Male to female ratio was 1:1. Birth weight mean 2614 + 749 (SD) gm, gestational age mean 37 + 3.1 (SD) weeks, 4 infants were <37 weeks. Mother age range between 20-35 years. History of a previous abortion was present in 38.55% of all mothers, and 53.8% of all mothers were diabetics. History of consanguinity was present in 61.5% of all cases. Chromosomal studies were normal in all cases studied (8). DALB were more common in the upper limbs than lower limbs (ratio 3.3:1), and in the left upper limb than the right upper limb (ratio 2.5:1). DALB in the upper limbs presented bilaterally in 36.4% of the cases, in the left side in 45.5% and in the right side in 18.1%. None of the infants had anemia, thrombocytopenia, fractures, hypophosphatemia or hypocalcemia. Seven patients had major congenital anomalies. Four infants had congenital heart disease. Two infants had esophageal atresia. One patient had multiple anomalies including diaphragmatic hernia, polycystic kidney and sacral agenesis. One patient had cleft lip and palate.

Conclusion: DALB in the population studied is more common than published literature. Major multiple congenital anomalies are present in more than half of the cases. Maternal diabetes and consanguinity are present in the majority of the cases.

## FCO5

### **MOTHER TO CHILD TRANSMISSION (MTCT) OF HIV: WHERE ARE WE AT AND WHERE ARE WE GOING? PRELIMINARY RESULTS FROM THE PERINATAL HIV REGISTER IMPLEMENTED IN CAMPANIA REGION OF SOUTHERN ITALY**

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Objective: Without specific interventions, the rate of HIV MTCT was estimated at 15-20% in Europe and USA, and 25-40% in African populations. As a combination of anti-retroviral therapy, elective C- section delivery and refraining from breastfeeding can substantially reduce the rate of MTCT, universal HIV testing of mothers to be is recommended. To monitor practices and outcome Public Health Department of Campania Region of Southern Italy implemented since 1997 a Register of infants exposed in utero to HIV. Material and Methods: All the live infants from seropositive delivering women entered a standardized work- up for prevention and diagnosis of MTCT and side- effects control. Risk factors for MTCT were carefully assessed near birth based on medical records and structured interview of mothers and personal gynecologist.

Results In the study period 108 infants were recruited; four of them were infected. Maternal category was A1 in 51, A2 in 35, B1 in 2, B2 in 5, B3 in 4, C1 in 1, C2 in 3, and C3 in 7. The 67% of the maternal infection were diagnosed before becoming pregnant and the 18% were diagnosed during gestation, while 15% of them were accomplished after delivery, based on the presence of risk factors such as a HIV positive partner and/or injecting drug abuse. A positive trend ( $X^2 < 0.001$ ) over time was found in the number of infant reported in the register and in the proportion child exposed to antiretroviral therapy either as monotherapy (41%) either as multitherapy (30%), in utero and postnatally (70%) either only postnatally (19%). C- section was carried out in 79% of the mothers and formula feeding was adopted in 90% of the infants. The most of breast fed infants passed to formula feeding within 2 or 3 days of life. One infant died at 7 days of live because of severe hearth disease. No serious side effects were found but mild anemia and prematurity (in 30% of the mothers submitted to multitherapy). At least one parent was immigrant from high prevalence locals such as sub- Saharan Africa and East Europe countries in 42 (39%) of the exposed infants and in 2/4 (50%) of the infected infants.

Conclusion: Campania region is considered a relatively protect geographic area, as estimates on 1997 were 3 to 5 exposed newborn on 70,000 birth rate, based on HIV antibody prevalence on newborn cards collected for other newborn screenings. Unpublished local data point out 45% of delivering women recorded an HIV test. Our data suggest there is an increasing number of infected women who become pregnant, an increasing number of infants exposed to ART in utero or in early life. Property of interven-