

the mother and, above all, for the fetus, which is exposed to the risks of prematurity and infection, and therefore to a high risk of mortality or morbidity, correlated with the duration of PRM.

**Keywords:** Preterm premature rupture of membranes, mortality, morbidity, neonatal outcome

### PP-027 Obstetrical and neonatal outcome of premature rupture of amniotic membranes before 28 weeks of gestatio

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**Objective:** Children born from mothers with hypertensive disorders during pregnancy and experiencing fetal growth delay are at an increased risk of developing motor, neurological, cognitive, and learning disorders, as well as cerebral palsy. Delay in language development (DLD) is one of the common long-term outcomes of fetal neurodevelopmental disruption. DLD entails a delay in the timely development of skills related to sound reproduction and speech compared to established average statistical norms depending on age. Purpose. The main purpose of the study is to determine the frequency and assess the potential association between the presence of DLD in fetuses of women with hypertensive disorders during pregnancy and the development of perinatal complication.

**Methods:** A retrospective analysis of 1295 exchange cards of pregnant women and delivery records was conducted at the Odessa Regional Perinatal Center. Fetal growth delay was diagnosed in 130 (10.03%) cases of singleton pregnancies in women with hypertensive disorders. Additionally, a prospective study and analysis of neurodevelopmental data of children up to 3.5 ( $\pm 3$  months) years old were conducted by surveying parents of children from the selection group with hypertensive disorders.

**Results:** Delay in language development was noted in 43.24% of the selection group children. Depending on the severity degrees, they were distributed as follows: Grade I - 9 children (15.48%) had a complete absence of speech by the age of 3; Grade II - 8 children (13.76%); Grade III - 16 children (27.52%). Regarding the development of motor skills according to age, the following data were obtained: 18.92% of children had a delay in the development of the head fixation skill within an acceptable time frame; 32.68% had a delay in the skill of pulling up legs; 8.6%

of children over 12 months old could not stand even with an additional support point fixation. It was established that the group with delayed neurodevelopment is under the supervision of a pediatric neurologist - 25 children (43.24%).

**Conclusion:** Thus, it was established that children born with fetal growth delay from mothers with hypertensive disorders are a high-risk group for the manifestation of long-term adverse perinatal outcomes. It was noted that the most significant deviations from age norms were found in children with DLD from mothers whose pregnancy was complicated by preeclampsia of moderate and severe degrees. The obtained results are consistent with global statistical data and once again confirm the need to prevent the development of this complication in the course of pregnancy.

**Keywords:** Hypertensive disorders, outcome, neurodevelopmental delay

### PP-028 Obstetric brachial plexus paralysis: a case-control study on risk factors, epidemiological and clinical perspectives

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**Objective:** Brachial plexus palsy is a redoubtable neonatal complication that can compromise the functional prognosis of the upper limb. This study aims to investigate the epidemiological and clinical aspects of obstetric brachial plexus palsy and to identify the risk factors involved.

**Methods:** This is a retrospective case-control study conducted in the Department of resuscitation and neonatal medicine of Sousse in Tunisia. It includes a sample of newborns who presented with OBPP lesions over a seven-year period from 01/01/2013 to 31/12/2019. A control group of the same size was randomly selected from the department's records for the analytical study.

**Results:** Our study, conducted in the maternity ward of CHU Farhat Hached in Sousse, revealed an overall average incidence of Brachial Plexus Palsy (BPP) of 1.05‰ live births from January 1, 2016, to December 31, 2019. The parturients had a mean age of 30.66 years, with 41.1% being primiparous. However, only 37% of

cases had adequate pregnancy monitoring. The primary pregnancy pathologies observed were gestational diabetes (23.3%), prolonged rupture of membranes (15.1%), and preeclampsia (5.5%). In terms of paralysis, 50.7% of cases were right-sided, 47.9% were left-sided, and 1.4% were bilateral. BPP was proximal (C5-C6+/-C7) in 82.4% of cases, complete in 16.2% of cases, and distal (C8-T1) in 1.4% of cases. The most frequently associated traumatic lesion with OBPP was a clavicle fracture, occurring in 17.8% of cases. Other associated lesions included sero-sanguineous bump (26%), diaphragmatic paralysis (5.6%), pneumothorax (2.8%), skull bone embarrures (2.8%), and humerus fracture (1.4%). Statistically significant differences were found for gestational diabetes ( $p=0.01$ ), premature delivery ( $p=0.007$ ), and term  $>40$  weeks of gestation ( $p=0.019$ ). Regarding delivery characteristics, statistically significant differences were found for shoulder dystocia ( $p<0.0001$ ) and cesarean delivery ( $p<0.0001$ ). In the multivariate analysis, the risk factors independently associated with OBPP were shoulder dystocia, forceps, and macrosomia. cesarean section emerged as a protective factor.

**Table 1.** Multivariate analysis : the risk factors independently associated with OBPP

Risk Factors	p	or
Shoulder dystocia	$< 0.001$	57.62
Forceps	0.001	10.18
Macrosomia	0.02	5.44
Caesarean section	0.014	0.11

**Conclusion:** Because of its unpredictable occurrence, the potential disability it can cause and the medico-legal implications arising from it, OBPP constitutes a major health challenge in Tunisia. This requires the implementation of preventive measures to limit the occurrence of these complications.

**Keywords:** Newborn, obstetric brachial plexus palsy, birth trauma

## PP-029 Poland syndrome manifesting as defective pectoralis major muscle and dextroscoliosis: a case report

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**Objective:** Poland syndrome is a rare congenital anomaly of unknown etiology, with variable clinical manifestations.

Classically, there is predominantly, unilateral aplasia or hypoplasia of the sternocostal head of the pectoralis major muscle and ipsilateral brachysyndactyly. Through this case report, we want to elaborate on the hypothesized origin, clinical presentation, and classification of Poland syndrome. The case report will also highlight the atypical presentation of ipsilateral absence of pectoralis major muscle without classical hand deformity in a female neonate.

**Methods:** We report the case of a newborn, female, outcome of normal vaginal delivery, born to 28 years old, gravida 5, parity 4, O positive mother at 38 weeks of gestation. Mother was unbooked, not investigated and did not go for regular antenatal visits. There is no history of consanguinity or maternal drug use during pregnancy. Baby had cried immediately after birth and the Apgar score at 1 and 5 minutes were 8 and 9 respectively. Baby weighed 3.2 kg at birth (50th - 90th percentile), length 51 cms (90th - 97th percentile), and head circumference 35.5 cms (90th percentile). Delivery room examination revealed asymmetric chest contour, with depression on the right side of the chest, and flattening of right pectoral region. No other obvious congenital malformation was detected.

**Results:** Chest X-ray was suggestive of clear lung fields and relatively, mild dextroscoliosis with lower thoracic and upper lumbar level involvement. Cranial and abdominal ultrasonography were unremarkable. Echocardiography was normal. MRI and ultrasonography chest reported non-visualization of the right-sided pectoralis major muscle. Hence, a diagnosis of Poland syndrome involving right hemithorax in a female neonate was established.

