dosage of misoprostol with no change in frequency for women over 24 weeks with one CS, as well as for all gestations with multiple previous CSs.

Conclusion: Medical management of IUFD in women with SU is challenging and evidence is scarce for women over 28 weeks. Senior involvement with individual risk assessment including ultrasound examination for placental localisation is vital with consideration to half the dosage of misoprostol recommended in FIGO23 (1) for all women with multiple LSCSs or one LSCS in 24-28 weeks. In the absence of safety data on using medical management over 28 weeks with SU, adequate counselling and consideration for mechanical methods is advisable.

Keywords: Intrauterine fetal death, scarred uterus. medical management

PP-039 COVID-19 during pregnancy and systemic inflammatory response syndrome

Nilufar Gashimova[1], Victoria Bitsadze[1], Jamilya Khizroeva[1], Kristina Grigoreva[1], Alexander Makatsariya[1]

[1] I.M. Sechenov First Moscow State Medical University, Department of Obstetrics, Gynecology and Perinatal Medicine, N. F. Filatov Clinical Institute of Children's Health, Moscow, Russia

DOI: 10.59215/prn.24.032supp039

Objective: During pregnancy, almost all body systems undergo physiological changes, but changes in the immune system and the hemostasis system, inflammation play a special role in the adaptation of pregnancy from its early stages. From the point of view of the functioning of the immune system, pregnancy is a unique condition during which the mother's body must, on the one hand, provide protection from pathogens, and on the other, show tolerance to fetal antigens. SARS-CoV-2 infection has selective effects on both the immune system and the hemostasis system, therefore pregnant women are at high risk of complications associated with SARS-CoV-2 and its effects on the mother and fetus. Therefore, the purpose of our study was to determine the relationship between disorders of the hemostatic system and immunity after suffering from COVID-19 during pregnancy.

Methods: The study included 90 pregnant women and their newborn children, who were divided into two groups, the first 45 women with COVID-19 during pregnancy and a control group of 45 healthy pregnant women. In all pregnant women, the levels of fibrinogen, von Willebrand factor (vWF), ADAMTS-13, platelet aggregation, concentration of the activation marker NETs (myeloperoxidase MPO), cytokines, chemokines, cell markers, and functional activity of T-reg cells were evaluated in the peripheral blood, as well as in the umbilical cord blood of their unborn.

Results: In group I, hyperfibrinogenemia (p<0.001), high concentrations of vWF antigen (p<0.001), disorders in the ADAMTS-13/vWF axis (p=0.001) (Figure 1) were detected in pregnant women, platelet aggregation with aggregation stimulators was increased: ADP (p<0.001), ristomycin (p<0.001), collagen (p<0.001), adrenaline (p<0.001), high MPO levels (p=0.046). High levels of cytokines and chemokines (IL 1a (p=0.018), IL 6 (p=0.032), IL-10 (p=0.003), MIP-1 (p<0.001), TNF a (p<0.001), CXCL10 (p<0.001)), MPO (p<0.001), increased expression of CD80 (p<0.001) and CD86 (p<0.001) on dendritic cells, decreased functional activity of T-reg (p<0.001) in the umbilical cord blood of group I newborns compared with the control group (Table 1).

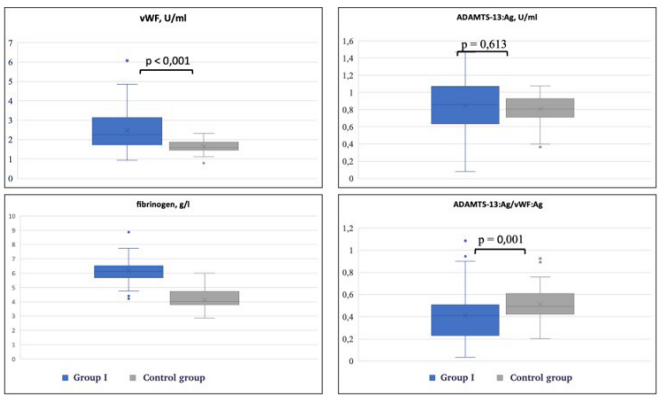

Fig 1. Indicators of fibrinogen, vWF, ADAMTS-13 and the ADAMTS-13/vWF axis in maternal peripheral blood

Table 1. Comparative analysis of the concentration of cytokines and chemokines in the umbilical cord blood of a newborn

Indicators in umbilical cord blood	Group I n=45		Control n = 45		p
	Me	Q_1–Q_3	Me	Q_1–Q_3	
CXCL 10	68.4	37.1-92.6	25.1	9.8-32.1	<0.001
GM-CSF	23.3	15.4-47.1	19.2	14.6-28.7	0.582
IFN-γ	6.3	3.2-11.9	4.4	3.5-6.9	0.436
IL-1α	6.5	1.8-21.3	1.8	1.2-5.3	0.018
IL-6	13.8	6.1-38.4	2.9	1.3-10.1	0.032
IL-8	52.7	23.1-418.3	21.9	6.7-116	0.041
IL-10	12.5	7.7-49.1	5.4	2.1-13	0.003
MIP-1β	501.2	247.6-1648.1	154.8	136.1-287.7	<0.001
TNFα	25.2	16.9-28.7	12.1	9.1-18.3	<0.001

Conclusion: COVID-19 causes systemic inflammatory response syndrome in both mother and fetus. In the mother, we see such changes as hyperfibrinogenemia, high concentrations of D-dimer, von Willebrand factor, a violation in the ADAMTS-13/vWF axis, platelet hyperactivation. Despite the normalization of

immunological parameters and cytokine profile in mothers, by the time of delivery, the immune system is dysregulated in newborns with the development of inflammatory status and activation of the immune system and a high risk of severe systemic inflammatory response syndrome.

Keywords: COVID-19, immunothrombosis, pregnancy, myeloperoxidase, vWF, ADAMTS-13, systemic inflammatory response syndrome

PP-040 Contribution of procalcitonin measured in umbilical cord blood in the management of asymptomatic early neonatal bacterial infections

Oussama Mghirbi[1], Mariem Barka[1], Sarra Becheur[2], Donia Brahem[1], Maha Taamli[1], Amani Khelifi[1], Sonia Merchaoui[1], Jihen ben Abdallah[2], Manel Bellalah[1], Nabiha Mahdhaoui[1]

[1]Sousse University, Ibn El Jazzar Medical Faculty of Sousse, Department of Resuscitation and neonatal Medicine, University Hospital Center Farhat Hached, Sousse, Tunisia
[2]Sousse University, Ibn El Jazzar Medical Faculty of Sousse, Department of Biochemistry Laboratory, University Hospital Center Farhat Hached, Sousse, Tunisia

DOI: 10.59215/prn.24.032supp040

Objective: Early neonatal bacterial infection (ENBI) remains a major cause of perinatal morbidity and mortality. Any delay in initiating therapy can have a negative impact on prognosis. The search for an optimal early marker in terms of sensitivity and specificity is therefore a topical issue. The aim of our study is to evaluate the contribution of Procalcitonin (PCT) measured in umbilical cord blood in the early diagnosis and management of asymptomatic ENBI.

Methods: This is a prospective evaluative study conducted over a 12-month period. We included all asymptomatic newborns with risk factors for ENBI, born at the Maternity and Neonatology Center of the Farhat Hached Hospital in Sousse, Tunisia. We performed a PCT dosage on umbilical cord blood at birth with a positivity threshold set at 0.5 ng/ml. The newborns included were managed according to a well-established national algorithm for the management of newborns with suspected ENBI. Subsequently, regardless of the PCT value, newborns were classified into three groups: certain, probable, and refuted ENBI according to the algorithm's criteria. Newborns with a diagnosis of certain or probable infection were considered infected.

Results: During the study period, 9685 live births were recorded, and 1235 newborns were suspected of having ENBI, representing 12.7% of live births. The number of asymptomatic newborns at risk of ENBI was 599. Of these, 279 newborns were included in our study. ENBI was diagnosed in 20 cases, representing 1.61% of at-risk situations and 2.06 ‰ of live births. Chorioamnionitis was the only risk factor statistically correlated with ENBI (p=0.003). For a threshold value of 0.5 ng/mL, the sensitivity, specificity, positive predictive value, and negative predictive value of cord PCT were 55%, 96.5%, 55% and 96.5% respectively. The threshold value for PCT found by the receiver operating characteristic curve (ROC curve) was 0.415 ng/mL. For this threshold, we found a sensitivity of 60% and a specificity of 96.5%.

Conclusion: Our work demonstrates that the use of Procalcitonin (PCT) in umbilical cord blood can help in early diagnosing Early Neonatal Bacterial Infection (ENBI). Chorioamnionitis was also among the important factors. The diagnose threshold for PCT was found to be 0.415 ng/mL. More studies are needed to support these findings and enhance neonatal outcomes.

Keywords: Newborn, bacterial infection, Procalcitonin

PP-041 Hypoxic and ischemic encephalopathy: current situation in Tunisia, a descriptive and analytical multicenter study

Oussama Mghirbi[1], Myriam Barka[1], Rim ben Aziza[2], Hajeur chourou[2], Samia Kacem[2], Amira Bouraoui[3], Nadia Nadia Hentati[3], Sadok hannechi[4], Sonia blibech[4], Mariem Youssef[5], Maher Saidene[5], Hachmi Ben Hammouda[5], Hayet Ben Hamida[6], Maroua Elouaer6, Kamel Monastiri6, Sonia Merchaoui[1], Nabiha Mahdhaoui[1]

[1]Sousse University, Ibn El Jazzar Medical Faculty of Sousse, Department of Resuscitation and neonatal Medicine, University Hospital Center Farhat Hached, Sousse, Tunisia
[2]Tunis Maternity and Neonatology Center, Department of Resuscitation and Neonatal Medicine, Tunis, Tunisia
[3]Hedi Chaker Hospital, Department of Resuscitation and Neonatal Medicine, Sfax, Tunisia
[4]Tunis Military Hospital Department of Resuscitation and Neonatal Medicine, Tunis, Tunisia
[5]Tahar Sfar Hospital, Department of Resuscitation and Neonatal Medicine, Mahdia, Tunisia
[6]Fattouma Bourguiba Hospital, Department of Resuscitation and Neonatal Medicine, Monastir, Tunisia

DOI: 10.59215/prn.24.032supp041

Objective: Regardless of the progress made in perinatal medicine, perinatal asphyxia (PNA) remains a major concern in developing countries. A multicenter study conducted in 2014 showed that the overall incidence was about 4‰ live births in Tunisia. The purpose of our research was to establish the occurrence of PNA, identify its causes and evaluate its outcomes based on hypoxic-ischaemic encephalopathy stage, and primary complications resulting from PNA.

Methods: A descriptive and analytical multicenter study was carried out from January to December 2020. It enrolled all full-term neonates admitted to six university hospital neonatology departments for management of PNA in Tunisia. Inclusion criteria were sentinel event during antenatal period or abnormalities on fetal heart rate monitoring, APGAR score<7 at fifth minutes or