shoulder dystocia management. As for the prevention, the American and the Royal College of Obstetricians and Gynecologists recommend elective caesarean section in case of an estimated fetal weight above 4500g or 5000g for diabetic and non-diabetic women, respectively, while the Department for Health and Wellbeing of the Government of South Australia is against elective birth in non-diabetic women with suspected fetal macrosomia.

Conclusion: Macrosomia is associated not only with shoulder dystocia but also with maternal and neonatal complications. Similarly, shoulder dystocia can lead to permanent neurologic sequalae as well as perinatal death if managed in a suboptimal way. Therefore, the development of consistent international practice protocols for their prompt diagnosis and effective management is of paramount importance in order to safely guide clinical practice and improve pregnancy outcomes.

Keywords: Macrosomia, should dystocia, large-for-gestational age, labor induction, diagnosis, management, guidelines

PP-012 Comparative review of guidelines on the diagnosis and management of neonatal hypoglycemia

Sonia Gkiouleka[1], Ioannis Tsakiridis[1], Maria Gkiouleka[2], Anastasia Daniilidou[1], Apostolos Mamopoulos[1], Apostolos Athanasiadis[1], Themistoklis Dagklis[1]

[1]Aristotle University of Thessaloniki, School of Medicine, Faculty of Health Sciences, Hippokrateion Hospital Third Department of Obstetrics and Gynecology, Thessaloniki, Greece

[2]Evelina London Children's Hospital, Paediatric Gastroenterology, London, United Kingdom

DOI: 10.59215/prn.24.032supp012

Objective: The aim of this study was to review and compare the recommendations from the most recently published guidelines on the screening, prevention, diagnosis and management of neonatal hypoglycemia.

Methods: We conducted a comparative review of guidelines from the American Academy of Pediatrics, the British Association of Perinatal Medicine, the European Foundation for the Care of the Newborn Infants, the Queensland Clinical Guidelines-Australia, the Canadian Pediatric Society and the Pediatric Endocrine Society on this frequent metabolic disturbance encountered by the neonate.

Results: There is agreement among the reviewed guidelines concerning the risk factors, the clinical manifestations of neonatal hypoglycemia as well as the main preventive strategies. Moreover, the early recognition of infants at risk, the timely identification of neonatal hypoglycemia and the prompt initiation of treatment are universally considered as cornerstones for the improvement of neonatal outcomes. In addition, all guidelines, except Pediatric Endocrine Society, recommend screening for neonatal hypoglycemia in asymptomatic high-risk and symptomatic newborns, but they disagree regarding the screening policy. Furthermore, the diagnosis should be confirmed by laboratory methods of blood glucose levels measurement, although treatment should not be deferred until then. The definition of neonatal hypoglycemia lacks uniformity, but it is agreed that a single blood glucose value cannot accurately define this clinical entity. Thus, the use of operational thresholds for the management of neonatal hypoglycemia is endorsed by all the reviewed guidelines, although discrepancies exist regarding the recommended cut-off values, the optimal treatment and surveillance strategies of both symptomatic and asymptomatic hypoglycemic neonates as well as the treatment targets.

	AAP	BAPM	EFCNI	AUS	CPS	PES
NH Diagnosis-Operational Thresholds	Generally adopted PG concentration defining NH for all infants= 47 mg/dL. The operational thresholds for PG concentration are 25-40 mg/dL (1.4-2.2mmol/L) in the first 4 h of life, 35-45mg/dL (1.9-2.5mmol/L) from 4-24 h of life and 45 mg/dL (2.5mmol/L) after 24 h of life.	BGL <1.0mmol/l at any time (severe). A single BGL value <2.5mmol/l in a neonate with abnormal clinical signs. BGL <2.0mmol/l and remaining <2.0mmol/l at next measurement in at-risk baby, without abnormal clinical signs. Persistent hypoglycemia: ≥3 times <2.0 mmol/l in the first 48h. Consider hyperinsulinism if BG concentration remains low or if glucose dose>8mg /kg/min required. BGL threshold 3.0mmol/l if suspected hyperinsulinism in the first 48 h.	BGL <1.0 mmol/L (18 mg/dL) associated with acute neurological dysfunction present the greatest risk of cerebral injury.	DH definition: symptomatic baby and/or BGL< 2.6 mmol/L. Severe hypoglycemia: BGL <1.5 mmol/L. Prolonged hypoglycemia: >48 h. Recurrent hypoglycemia: ≥3 sequential episodes of BGL<2.6 mmol/L	Transitional hypoglycemia within the first 72 h post-birth: BGL <2.6 mmol/L. Persistent hypoglycemia: BGL<3.3 mmol/L beyond the first 72 h post-birth. Threshold glucose value that requires action: 2.0 mmol/L	Normal PG concentration in neonates >48h: 3.9-5.5 mmol/L. Normal PG concentration in neonates <48h: >3.0-3.6 mmol/L. For neonates with a suspected congenital hypoglycemia and older infants with a confirmed hypo-glycemia, treatment target recommended: PG>3.9 mmol/L. For high-risk neonates without a suspected congenital hypoglycemia, treatment target suggested: PG>2.8 mmol/L for those aged <48 h and >3.3 mmol/L for those aged >48 h.

Conclusion: Neonatal hypoglycemia is a matter of keen debate in contemporary neonatology and one of the leading causes of term admission to Neonatal Intensive Care Unit. The development of consistent international protocols for the management of this biochemical abnormality seems of insurmountable importance in order to prevent brain injury and neurodevelopmental impairment and optimize the outcomes of hypoglycemic neonates.

Keywords: Neonatal hypoglycemia, screening, management, guidelines

PP-013 A Happy ending of a velamentous cord insertion

Paula Granja[1]

[1]Hospital da Luz - Clínica de Amarante, Obstetric Department, Amarante, Portugal

DOI: 10.59215/prn.24.032supp013

Objective: Velamentous Cord Insertion is an umbilical cord attachment to the membranes surrounding the placenta instead of the central mass. The estimated incidence was 0.4% - 11% in singleton pregnancies, with higher incidence in twin pregnancies (1.6% -40%).

Velamentous cord insertion was associated with adverse perinatal outcomes, most notably pre-term birth and emergency caesarean section in singleton pregnancies, and perinatal mortality in twins; however, the prenatal diagnosis is based upon the presence of characteristic sonographic findings (membranous umbilical vessels) at the placental cord insertion, this becomes more difficult with advancing gestation.

Methods: A 32 year old woman, gravid 2, para 1, with 24 weeks low-risk gestation came to our clinic to have a routine transabdominal ultrasonography with a suspicion velamentous cord insertion. The fetal growth was normal, the cord seemed to end some centimetres from the placenta, at which point the umbilical vessels separate from each other and cross between the amnio and chorion before connecting to the subchorionic vessels of the placenta, located on the anterior wall. Colour doppler imaging enhances identification of the vessels (Figure1). The suspicion of velamentous cord insertion was done at 12 weeks' gestation scan when the site of placental cord insertion seemed localized at the edge of the placental disk (Figure 2).

Results: I warned for adverse perinatal outcome (fetal growth restriction, need for caesarean delivery, intrapartum and postpartum bleeding) and I advised pregnancy monitoring more closely. She did several scans and the suspicion of velamentous cord insertion was strong in all of them, especially with the use of colour doppler. Fetal growth was normal and compatible with 12th weeks scan.

This clinical information was very important to the clinical team when she was admitted to the hospital in labour at 39 th weeks gestation. A vaginal delivery it happened.

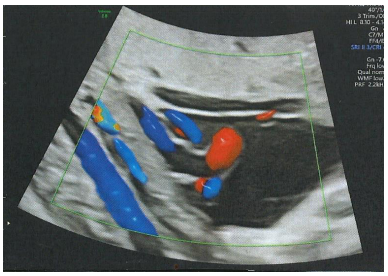

Fig 1. VCI suspicion in 3rd Trimester of gestation

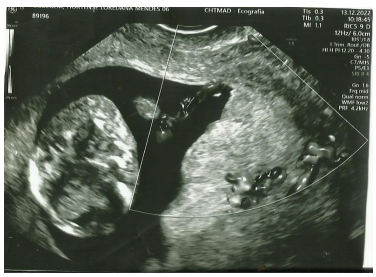

Fig 2. 1st Trimester VCI suspicion

A female infant was delivered, weighing 3100 gr, with Apgar score of 8 and 9 at 1st and 5th min. There was no record of neonatal or obstetric complications. After giving birth to the baby, the mother was instructed to expel the placenta, which according to her was like having another birth. A small placenta with velamentous cord insertion were observed (Figure 3).

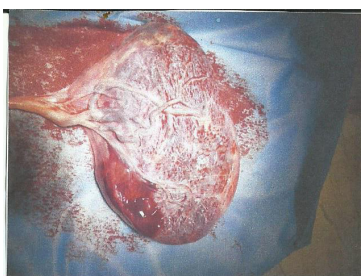

Fig 3. Velamentous Cord Insertion

Conclusion: This case was approached with care in his surveillance, although velamentous cord insertion was suspected before birth, many of its sequelae are