

Conclusion: Monoamniotic twins are admitted at 24-28 weeks for daily fetal heart rate monitoring. The optimal surveillance strategy remains uncertain but may involve non-stress testing (NST) or assessment of biophysical profiles. Betamethasone is administered for pulmonary maturation. If fetal testing remains reassuring and no other concerns arise, delivery via cesarean section is typically scheduled between 32-34 weeks to prevent umbilical cord accidents.

Keywords: Monoamniotic twins, cord entanglement, cord accidents

PP-011 A comparative review of guidelines on macrosomia and shoulder dystocia

Sonia Gkiouleka¹, Ioannis Tsakiridis¹, Elpida Ralli¹, Ioannis Kalogiannidis¹, Apostolos Mamopoulos¹, Apostolos Athanasiadis¹, Themistoklis Dagklis¹

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

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Objective: The aim of this study was to review and compare the most recently published influential guidelines on the diagnosis, prevention and management of fetal macrosomia and shoulder dystocia, which are both associated with adverse pregnancy outcomes.

Methods: A comparative review of guidelines from the American College of Obstetricians and Gynecologists, the Royal College of Obstetricians and Gynecologists, the National Institute for Health and Care Excellence, the Royal Australian and New Zealand College of Obstetricians and Gynaecologists and the Department for Health and Wellbeing of the Government of South Australia on macrosomia and shoulder dystocia was conducted.

	ACOG	RCOG	DHWSA
Definition-Diagnosis	Failure to deliver the fetal shoulder(s) with gentle downward traction on the fetal head, requiring additional obstetric maneuvers. Obstruction of the descent of the anterior shoulder by the symphysis pubis or impaction of the posterior shoulder on the maternal sacral promontory.	A vaginal cephalic delivery that requires obstetric maneuvers to deliver the fetus after the head has delivered and gentle traction in axial direction has failed. Head to body delivery interval ≥ 60 sec. Impaction of the anterior or the posterior fetal shoulder behind the maternal symphysis pubis or the sacral promontory respectively.	Vaginal birth of the fetal head requiring additional maneuvers beyond routine axial traction to deliver the fetal shoulders. Head to body delivery interval ≥ 60 sec. Impaction of the anterior or the posterior fetal shoulder behind the symphysis pubis or the sacral promontory respectively.
Signs of SD	"Turtle" sign.	"Turtle" sign. Failure of restitution of fetal head. Failure of shoulders descend. Difficulty with face and chin delivery.	Prolongation of face and chin delivery. "Turtle" sign. Failure of external rotation. No emerge of the anterior shoulder with routine axial traction.
Prevention	Labor induction not routinely recommended for suspected macrosomia. Consider elective c-section if EPW>5000g in non-diabetic women and if EPW>4500g in diabetic women. Not recommended solely due to previous SD.	Elective birth recommended at >38w in diabetic woman with normally grown fetus. Labor induction not recommended in non-diabetic women with suspected macrosomia. Consider elective c-section if EPW>4500g in diabetic women. If previous SD, mode of delivery decided by the woman and her carers.	Elective birth not recommended in non-diabetic women with suspected macrosomia. If previous SD, elective c-section not routinely recommended. Take into consideration woman's preference, previous neonatal or maternal injury and fetal size.
Management-First line maneuvers	Additional assistance, instruction to mother to stop pushing, McRoberts, suprapubic pressure, avoidance of fundal pressure.	Additional assistance, McRoberts, suprapubic pressure, avoidance of fundal pressure.	Additional assistance, McRoberts, suprapubic pressure, avoidance of fundal pressure, fetal rotation and excessive traction.
Management-Second line maneuvers	Delivery of posterior arm, Rubin, Woods Screw, all-fours position, posterior axillary sling traction	Delivery of posterior arm, internal rotational maneuvers (Woods, Rubin), all-fours position	Delivery of posterior arm, internal anterior shoulder displacement, internal anterior and posterior shoulder rotation, reverse posterior shoulder rotation, all-fours position
Management-Third line maneuvers	Zavanelli, abdominal rescue, symphysiotomy, cleidotomy	Zavanelli, cleidotomy, symphysiotomy, posterior axillary sling	Zavanelli, cleidotomy, symphysiotomy, posterior axillary sling traction

Results: The American and the Australian College of Obstetricians and Gynecologists agree that macrosomia should be defined as birthweight above 4000-4500g regardless of the gestational age, while the National Institute for Health and Care Excellence defines macrosomia as an estimated fetal weight above the 95th percentile. According to the first two medical societies, ultrasound scans and clinical estimates can be used to rule out fetal macrosomia, although lacking accuracy. Exercise, appropriate diet and pre-pregnancy bariatric surgery are mentioned as preventive measures. It is unanimously discouraged to routinely induce labor before

39 weeks of gestation with the sole indication of suspected fetal macrosomia, but an individualized counseling should be provided. There is also agreement among the reviewed medical societies concerning the definition and the diagnosis of should dystocia with the "turtle sign" being the most frequent sign for its recognition as well as the poor predictability of the reported risk factors. In addition, there is consensus on the algorithm of shoulder dystocia management with McRoberts technique suggested as first-line maneuver. Moreover, all guidelines agree that appropriate staff training, thorough documentation and time keeping are crucial aspects of

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 sequelae 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, shoulder 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 Gkiouleka¹, Ioannis Tsakiridis¹, Maria Gkiouleka², Anastasia Daniilidou¹, Apostolos Mamopoulos¹, Apostolos Athanasiadis¹, Themistoklis Dagklis¹

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

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

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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.