Southwest General

Partnering with

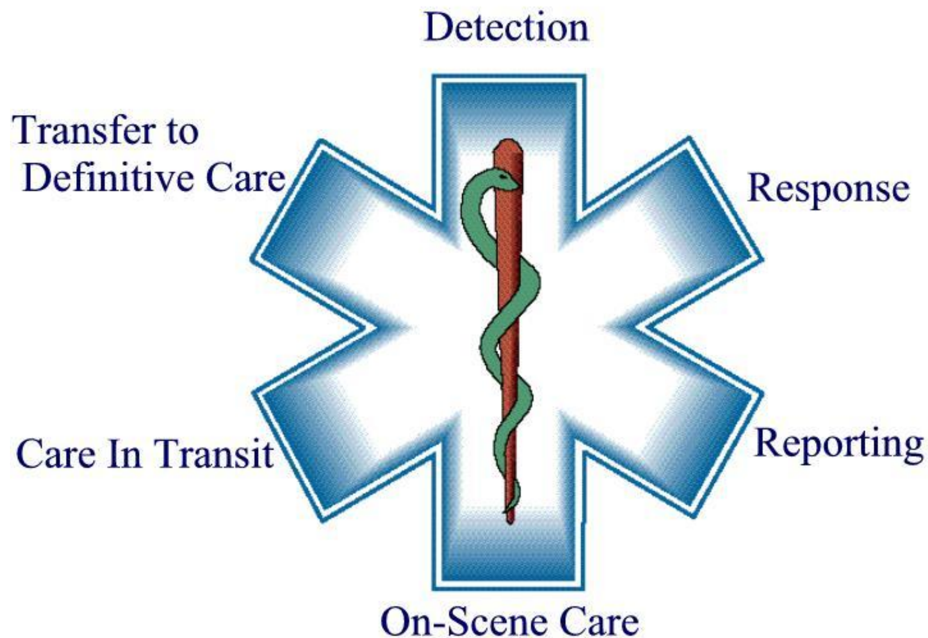
University Hospitals

EMS Services

PRE-HOSPITAL CARE

MEDICAL CONTROL

PROTOCOLS AND PROCEDURES



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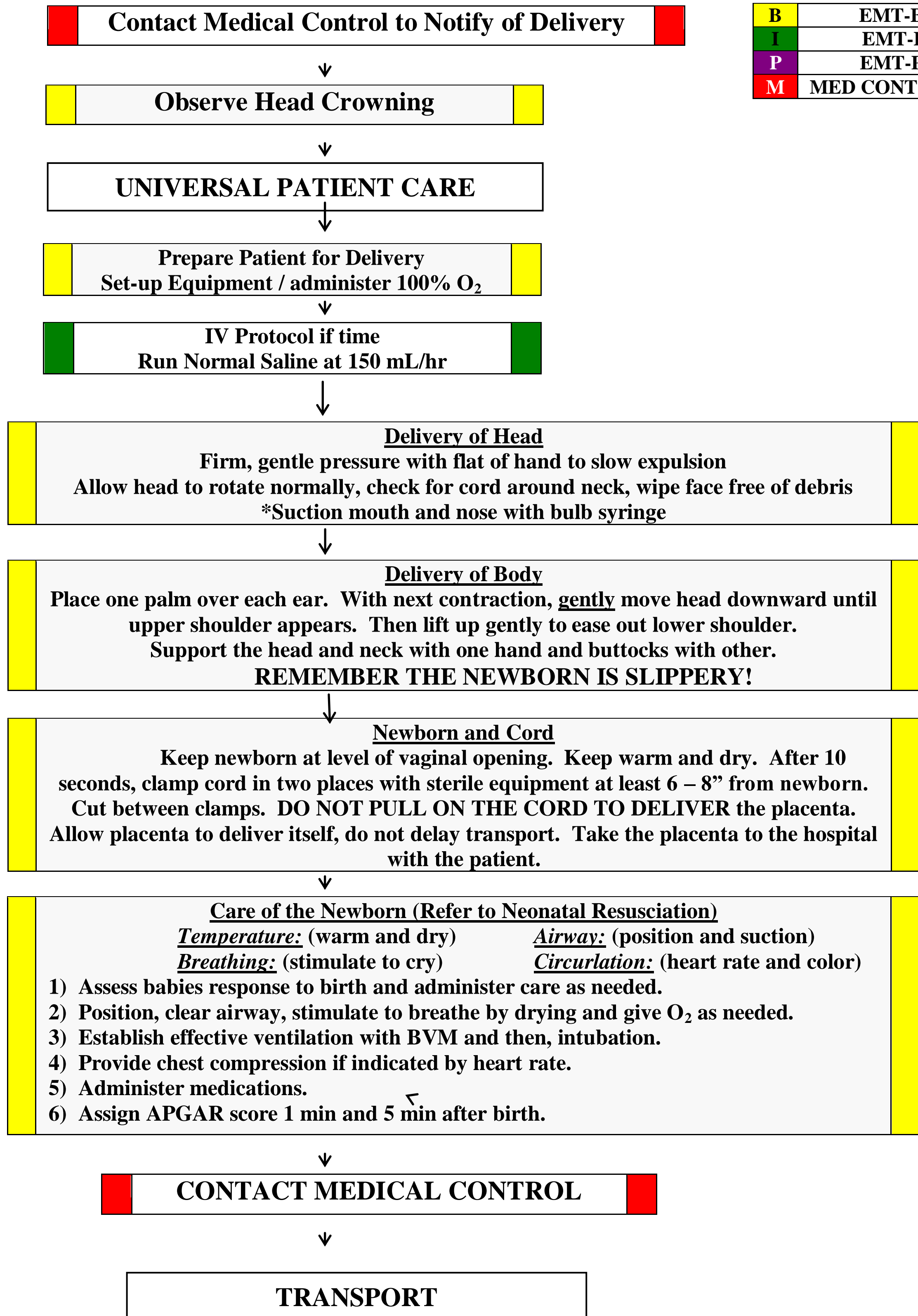
CHILDBIRTH / OBSTETRICAL EMERGENCIES

UNCOMPLICATED DELIVERY

B	EMT-B	B
I	EMT-I	I
P	EMT-P	P
M	MED CONTROL	M



Southwest General Health Center /EMS Services
Revised 03/2007, 06/2007, 01/2012

CHILDBIRTH / OBSTETRICAL EMERGENCIES

UNCOMPLICATED DELIVERY

CONTACT MEDICAL DIRECTION IMMEDIATLEY WHEN DELIVERY IS IMMINENT

History	Signs and Symptoms	Differential Diagnosis
• Due date • Time contractions started / how often • Rupture of membranes • Time / amount of any vaginal bleeding • Sensation of fetal activity • Past medical and delivery history • Medications	• Spasmotic pain • Vaginal discharge or bleeding • Crowning or urge to push • Meconium • Left lateral position • Inspect perineum (No digital vaginal exam)	• Abnormal presentation • Buttock • Foot • Hand • Prolapsed cord • Placenta previa • Abruptio placenta

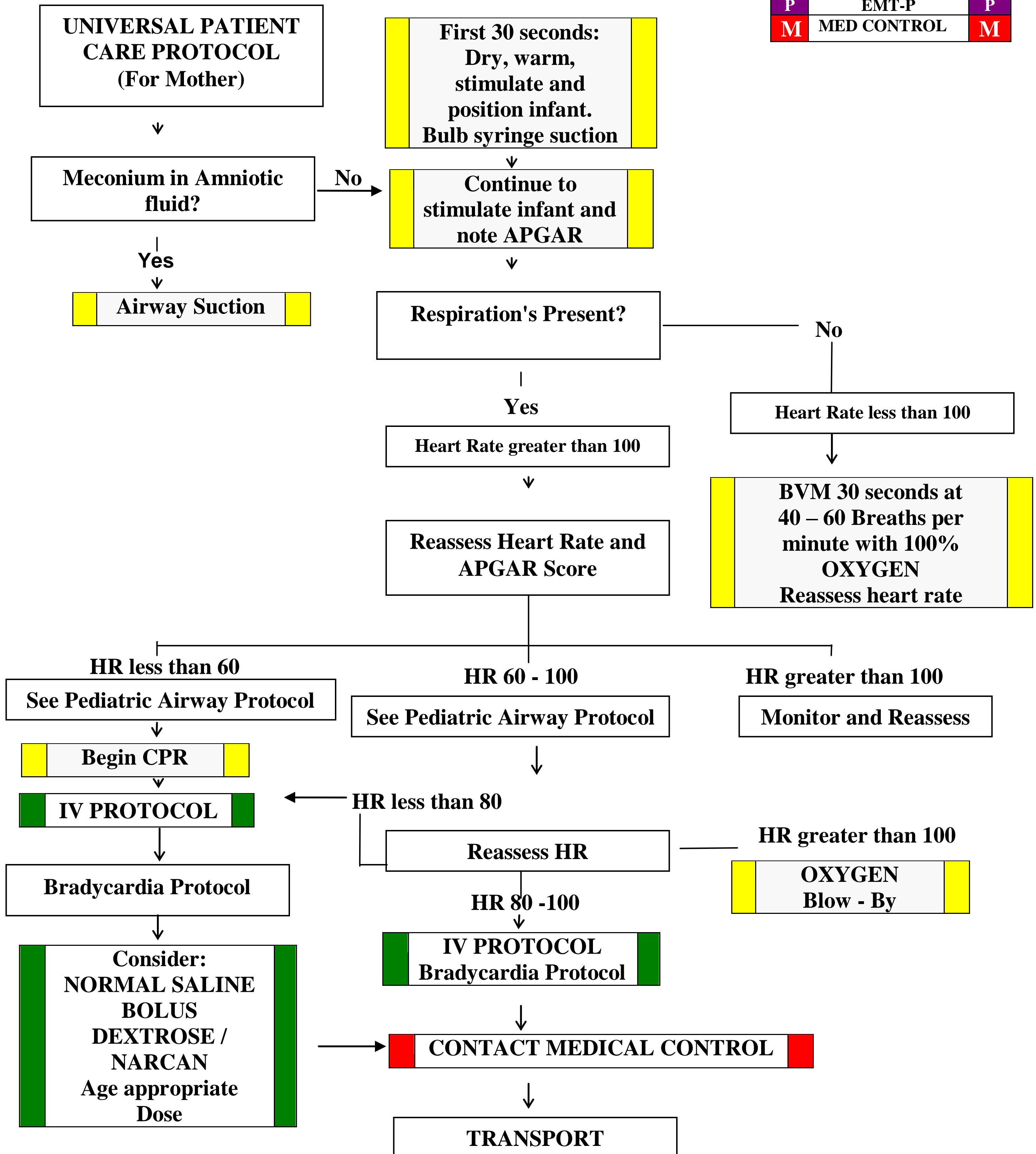
GENERAL CONSIDERATIONS:

- Exam (of Mother): Mental Status, Heart, Lungs, Abdomen, Neuro
- Document all times (delivery, contraction frequency, and length).
- If maternal seizures occur, refer to the Obstetrical Emergencies Protocol.
- After delivery, massaging the uterus (lower abdomen) will promote uterine contraction and help to control post-partum bleeding.
- Some perineal bleeding is normal with any childbirth. Large quantities of blood or free bleeding are abnormal.
- If delivery becomes imminent, prepare to deliver and protect mother’s privacy if possible (stop the squad and prepare for delivery).
- Newborns are very slippery, so be careful not to drop the baby.
- There is no need to wait on scene to deliver the placenta.
- If possible, transport between deliveries if the mother is expecting twins.
- Allow the placenta to deliver, but DO NOT delay transport while waiting.
- DO NOT PULL ON THE UMBILICAL CORD WHILE PLACENTA IS DELIVERING.

APGAR SCORING			
SIGN	**0**	**1**	**2**
COLOR	Blue / Pale	Pinnk Body, Blue Extremities	Completely Pink
HEART RATE	Absent	Below 100	Above 100
IRRITABILITY (response to stimulation)	No Response	Grimace	Cries
MUSCLE TONE	Limp	Flexion of Extremities	Active Motion
RESPIRATORY EFFORT	Absent	Slow and Regular	Strong Cry

CHILDBIRTH / OBSTETRICAL EMERGENCIES

PEDIATRIC NEONATAL RESUSCITATION



PEDIATRIC NEONATAL RESUSCITATION

History	Signs and Symptoms	Differential Diagnosis
• Due date and gestational age • Multiple gestation (twins, etc.) • Meconium • Delivery difficulties • Congenital disease • Medications (maternal) • Maternal risk factors substance abuse, smoking	• Respiratory distress • Peripheral cyanosis or mottling (normal) • Central cyanosis (abnormal) • Altered level of responsiveness • Bradycardia	• Airway failure • Secretions • Infection • Maternal medication effect • Hypovolemia • Hypoglycemia • Congenital heart disease • Hypothermia

GENERAL CONSIDERATIONS:

- Exam: Mental Status, Skin, HEENT, Neck, Chest, Heart, Abdomen, Extremities, Neuro
- Maternal sedation or narcotics will sedate infant (Naloxone effective).
- Consider hypoglycemia in infant.
- Document 1 and 5 minute APGAR scores (see Appendix).
- If the patient is in distress, consider causes such as, hypovolemia. Administer a 10 mL/kg fluid bolus of normal saline.
- If the BGL less than 40 mg/dl go to the Pediatric Diabetic Protocol.
  - IV/IO can be administered.

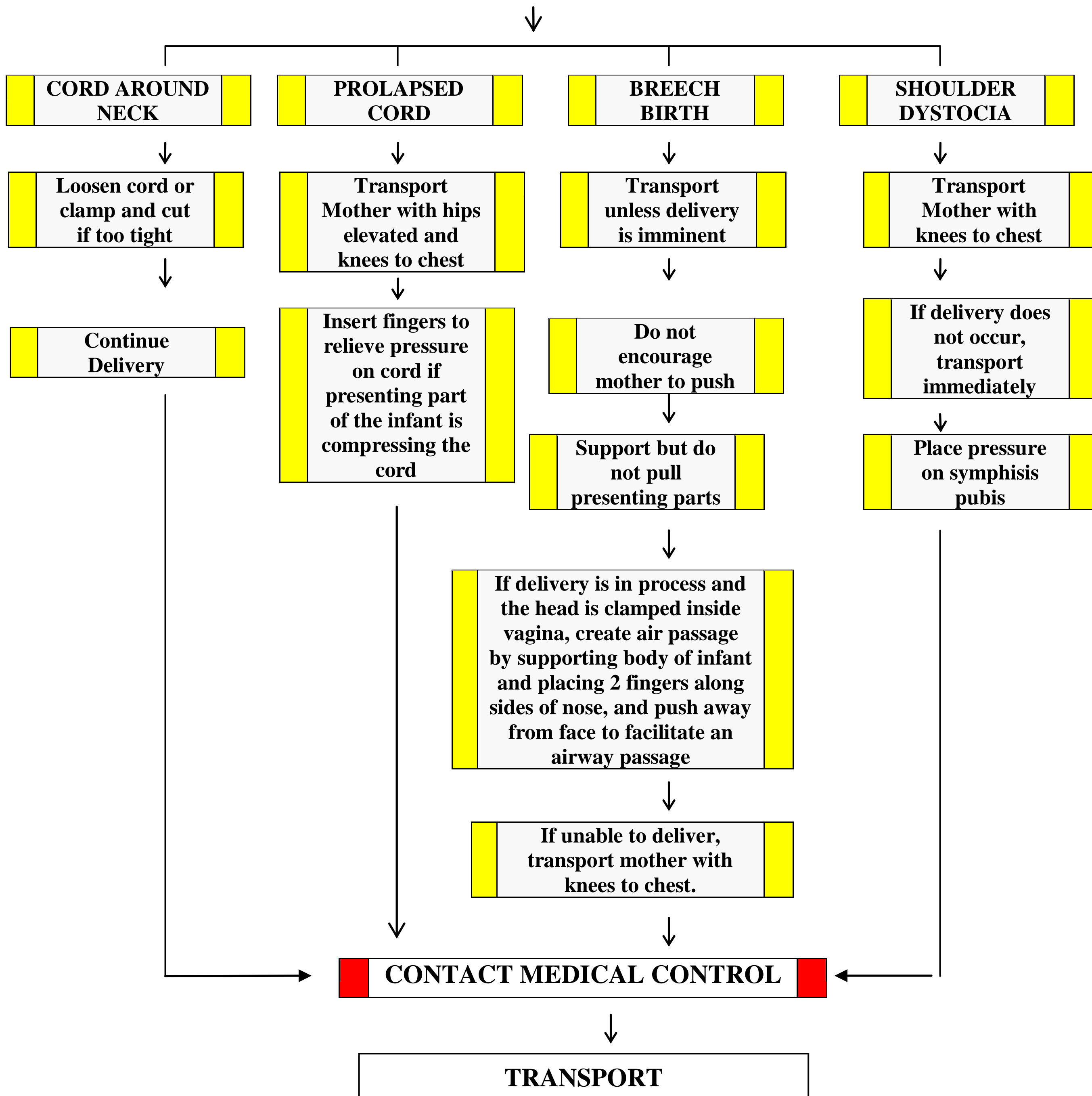
  Dextrose administration: **Neonate**: ***D10 soultion*** = (250 mL bag of NS withdraw and discard 50 mL and then add 50 mL of D50 to the 200 mL NS to make D10 solution, give: 5-10 mL/kg).
  Infants and children: 2 – 4 mL/kg IV of a D25 solution. May be repeated x1 after 5 minutes ***D25 solution*** = (Mix D50 with 50 mL NS).
- Hypothermia is a common complication of home and field deliveries. Keep the baby warm and dry.
- If there is a history of recent maternal narcotic use, consider Naloxone (Narcan) 0.1 mg/kg every minute until patient responds.
- Meconium may need to be suctioned several times to clear airway. It may also be necessary to visualize the trachea and suction the lower airway. Lower airway suction is achieved by intubating the infant and suctioning directly through the ET tube using the aspirator each time suctioning is done. This lower airway suction is only done when the infant is NOT vigorous.
- If drying and suction has not provided enough stimulation, try rubbing the infant's back or flicking their feet. If the infant still has poor respiratory effort, poor tone, or central cyanosis, consider them to be distressed. Most distressed infants will respond quickly to BVM.
- Use caution not to allow newborns to slip from grasp.

APGAR SCORING

SIGN	0	1	2
Color	Blue / Pale	Pink Body, Blue Extremities	Completely Pink
Heart Rate	Absent	Below 100	Above 100
IRRITABILITY (Response to Stimulation)	No Response	Grimace	Cries
Muscle Tone	Limp	Flexion of Extremities	Active Motion
Respiratory Effort	Absent	Slow and Regular	Strong Cry

CHILDBIRTH / OBSTETRICAL EMERGENCIES

ABNORMAL BIRTH EMERGENCIES



CHILDBIRTH / OBSTETRICAL EMERGENCIES		
ABNORMAL BIRTH EMERGENCIES		
CONTACT MEDICAL DIRECTION IMMEDIATELY WHEN ANY ABNORMAL BIRTH PRESENTATION IS DISCOVERED		
History	**Signs and Symptoms**	**Differential Diagnosis**
• Past medical history • Hypertension meds • Prenatal care • Prior pregnancies / births Gravida / Para • Ultrasound Findings in Prenatal Care	• Frank Breech (buttocks presents first) • Footling Breech (one foot or both feet presenting) • Transverse Lie (fetus is on his/her side with possible arm or leg presenting) • Face First Presentation • Prolapsed Cord (umbilical cord presents first)	• Miscarriage • Stillbirth

GENERAL CONSIDERATIONS:

- DO NOT pull on any presenting body parts.
- These patients will most likely require a c-section, so immediate transport is needed.
- Prolonged, non-progressive labor distresses the fetus and mother. Be sure to reassess mother's vital signs continuously.

Cord Around Baby's Neck:

- As baby's head passes out the vaginal opening, feel for the cord. Initially try to slip cord over baby's head; if too tight, clamp cord in two places and cut between clamps.

Breech Delivery:

- Footling Breech, which is one or both feet delivered first
- Frank Breech, which is the buttocks first presentation
- Feet or buttocks first become visible, there is normally time to transport patient to nearest facility.
- If upper thighs or the buttock have come out of the vagina, delivery is imminent.
- If the child's body has delivered and the head appears caught in the vagina, the EMT must support the child's body and insert two fingers into the vagina along the child's neck until the chin is located. At this point, the two fingers should be placed between the chin and the vaginal canal and then advanced past the mouth and nose.
- After achieving this position, a passage for air must be created by pushing the vaginal canal away from the child's face. This air passage must be maintained until the child is completely delivered.

Excessive Bleeding Pre-Delivery:

- If bleeding is excessive during this time and delivery is imminent, in addition to normal delivery procedures, the EMT should use the hypovolemic shock protocol.
- If delivery is not imminent, patient should be transported on her left side and shock protocol followed.

Excessive Bleeding Post-Delivery:

- If bleeding appears to be excessive, start IV of saline. Follow HYPOVOLEMIC SHOCK PROTOCOL.
- If placenta has been delivered, massage uterus and put baby to mother's breast.

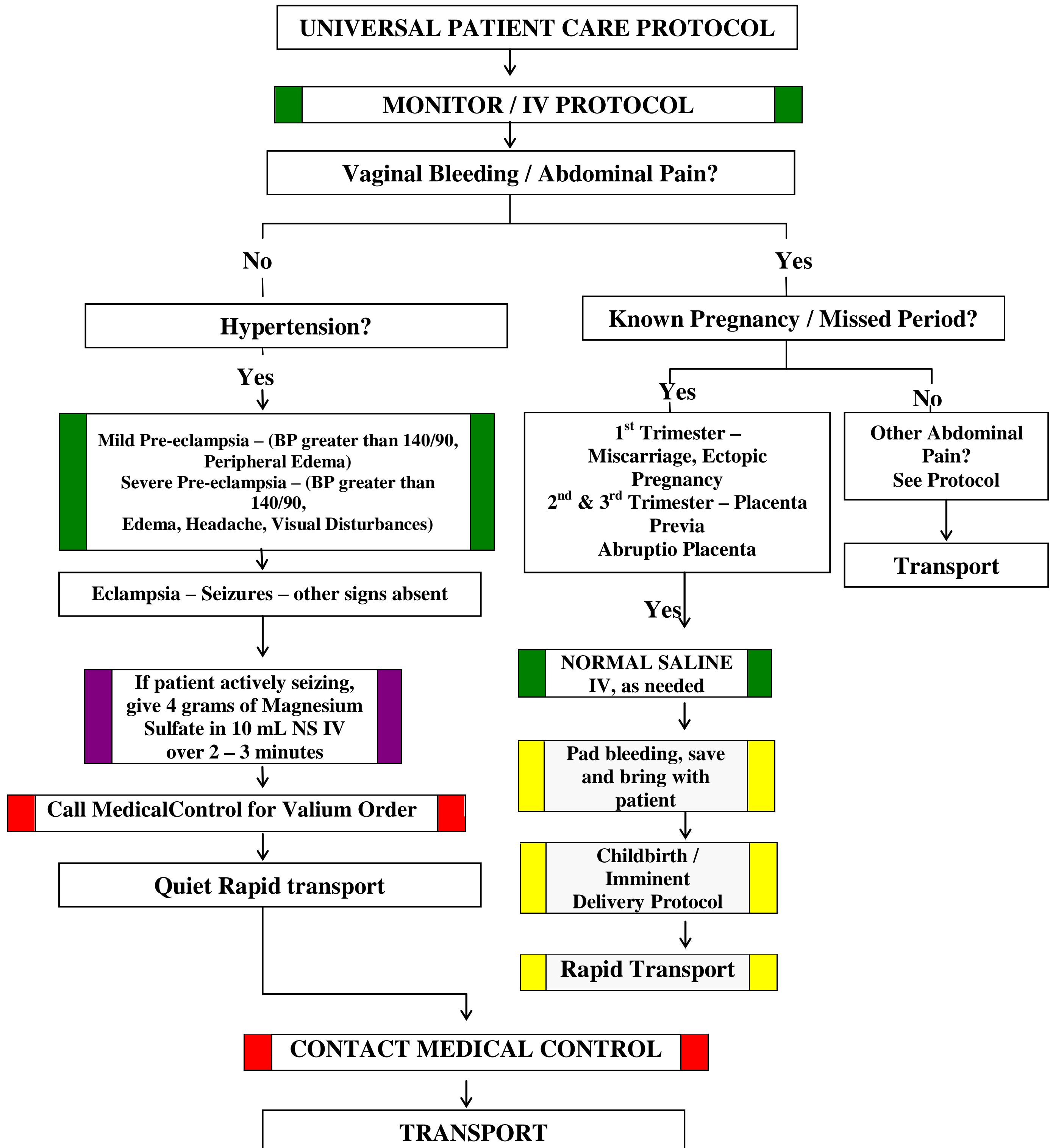
Prolapsed Cord:

- When the umbilical cord passes through the vagina and is exposed, the EMT should check cord for a pulse.
- The patient should be transported with hips elevated or in the knee chest position and a moist dressing around cord.
- If umbilical cord prolapsed, insert two fingers to elevate presenting part away from cord, distribute pressure evenly when occiput presents.
- DO NOT attempt to push the cord back. High flow oxygen and transport IMMEDIATELY.

Shoulder Dystocia:

- Following delivery of the head, the shoulder(s) become "stuck" behind the symphisis pubis or sacrum of the mother.
- Occurs in approximately 1% of births.

OBSTETRICAL EMERGENCIES



CHILDBIRTH / OBSTETRICAL EMERGENCIES

OBSTETRICAL EMERGENCIES

History	Signs and Symptoms	Differential Diagnosis
• Past medical history • Hypertension meds • Prenatal care • Prior pregnancies / births • Gravida / Para	• Vaginal bleeding • Abdominal pain • Edema of hands and face • Seizures / Hypertension • Severe headache • Visual changes	• Pre-eclampsia / Eclampsia • Placenta previa • Placenta abruptio • Spontaneous abortion

GENERAL CONSIDERATIONS:

- Exam: Mental Status, Abdomen, Heart, Lungs, Neuro

General Information:

- May place patient in a left lateral position to minimize risk of supine hypotensive syndrome.
- Ask patient to quantify bleeding - number of pads used per hour.
- Pregnant patients if transported with a C-Collar and backboard must be strapped securely on board and tilted 20 degrees on left side relieving compresson on vena cava.
- DO NOT apply packing to the vagina.
- Be alert for fluid overload when administering fluids.
- Consider starting a second IV if the patient is experiencing excessive vaginal bleeding or hypotension.
- Transport to an appropriate OB facility if the patient is pregnant.

Abortion / Miscarriage: • The patient may be complaining of cramping, nausea, and vomiting. • Be sure to gather any expelled tissue and transport it to the receiving facility. • Signs of infection may not be present if the abortion / miscarriage was recent. • An abortion is any pregnancy that fails to survive over 20 weeks. When it occurs naturally, it is commonly called a “miscarriage”.	**Post Partum Hemorrhage:** • Post partum blood loss greater than 300-500 mL • Bright red vaginal bleeding • Be alert for shock and hypotension
Abruptio Placenta: • Usually occurs after 20 weeks. • Dark red vaginal bleeding. • May only experience internal bleeding. • May complain of a “tearing” abdominal pain.	**Uterine Inversion:** • The uterine tissue presents from the vaginal canal • Be alert for vaginal bleeding and shock
Ectopic Pregnancy: • The patient may have missed a menstrual period or had a positive pregnancy test. • Acute unilateral lower abdominal pain that may radiate to the shoulder. • Any female of childbearing age complaining of abdominal pain is considered to have an ectopic pregnancy until proven otherwise.	**Pre-Eclampsia / Eclampsia:** • Severe headache, vision changes, or RUQ pain may indicate pre - eclampsia. • In the setting of pregnancy, hypertension is defined as a BP greater than 140 systolic and greater than 90 diastolic, or a relative increase of 30 systolic and 20 diastolic from the patient's normal (pre-pregnancy) blood pressure.
Pelvic Inflammatory Disease: • Be tactful when questioning the patient to prevent embarrassment. • Diffuse back pain. • Possibly lower abdominal pain. • Pain during intercourse. • Nausea, vomiting, or fever. • Vaginal discharge. • May walk with an altered gait due to abdominal pain.	**Uterine Rupture:** • Often caused by prolonged, obstructed, or non-progressive labor • Severe abdominal pain
Placenta Previa: • Usually occurs during the last trimester. • Painless bright red vaginal bleeding.	**Vaginal Bleeding:** • If the patient is experiencing vaginal bleeding, DO NOT Pack the vagina, pad on outside only