Protocol for the Management of Meconium Stained Amniotic Fluid

Incidence of Meconium Stained Liquor:

- Less than 5% in preterm pregnancies (may be associated with infection and chorioamnionitis)
- 12-15% in term pregnancies
- Up to 50% in post-mature pregnancies

Diagnosis:

When the amniotic membrane is ruptured spontaneously or artificially, green stained amniotic fluid with or without particles is diagnostic. Meconium stained fluid may thin or thick. Infrequently the meconium in the amniotic fluid indicates fetal stress.

Management Antenatal and Intrapartum:

*Thin meconium stained amniotic fluid is benign and does not require any special care.*

Thick meconium stained amniotic fluid will require the following procedures:
1. An obstetrician should be called when thick meconium is diagnosed.
2. Amnioinfusion: An intra-uterine pressure catheter is introduced to the endometrial cavity posterior to the presenting part. 800-1000 cc of warmed Ringers or Normal Saline is infused rapidly into the amniotic cavity and then 250-300cc of fluid is infused every hour until the baby is born. (The idea is to dilute the meconium and prevent meconium aspiration and meconium pneumonia)
3. Cesarean Section is not necessary unless fetal distress occurs.

Management Postnatal:

1. Call the paediatrician to attend the delivery
2. Suction the mouth first and the nose second (naso-pharynx) on the perineum before the delivery of the shoulders.
3. If baby is depressed and or premature it is recommended to suction the trachea via endotracheal intubations and or manually (this should only be performed by a qualified physician).
4. Term and vigorous babies only need naso-pharynx suction.
5. Term depressed babies need tracheal suction and resuscitation.
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Meconium stained amniotic fluid

Thick
Suction on perineum - mouth, nose and posterior pharynx before the delivery of the shoulder. Continue with resuscitation if needed. Dry, stimulate and reposition baby

Is the baby vigorous?
Yes
Continue with resuscitation If needed
No

Thin
Suction on perineum – mouth and nose. Continue with resuscitation if needed. Dry, stimulate and reposition baby

Suction mouth and trachea
Continue resuscitation