

How to Use EXIT to Rescue Foals During Dystocia

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Support Foal During Stage II

- Beginning resuscitation
- Relieving the haste to correct the dystocia
- Allowing for more time for correction



EXIT



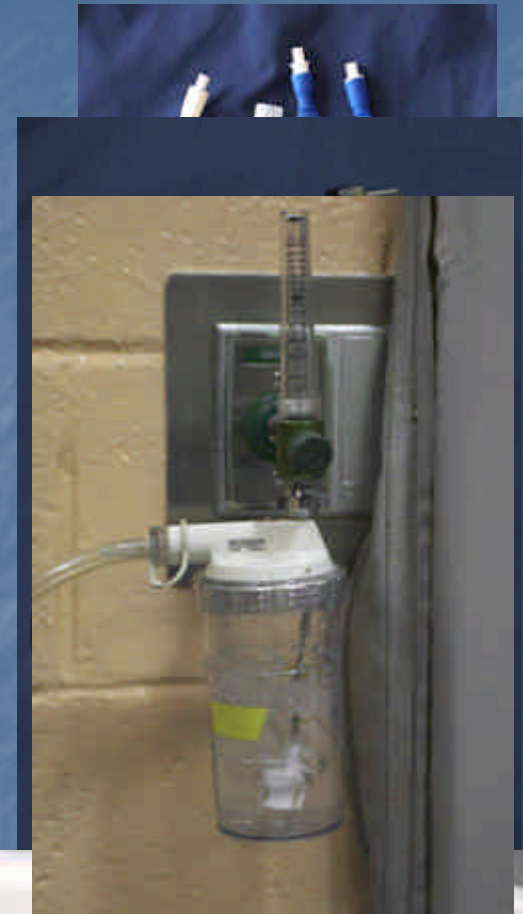
Ex-utero
Intrapartum
Treatment

Development of EXIT



EXIT Equipment

- Endotracheal tube
 - 7 to 10 mm ID 55 cm
- Self-inflating bag-valve device
- Capnograph
- Oxygen



EXIT Technique

- During a dystocia
 - If nares are external
 - If nose in the pelvic canal, palpable
- Intubation attempted
 - Placement checked
 - Bain Circuit
- Ventilation initiated
 - Self inflating bag

EXIT Technique

- Carbon dioxide detector
 - Capnograph
 - Easy Cap II



EXIT Capnography

- Monitor cardiac output
 - ETCO₂ correlates with cardiac output
- Ventilation
 - Transition - placental to pulmonary circulation
- Initially ETCO₂ low (4 – 8 torr)
 - Residual tissue levels
- ETCO₂ levels predict viability
 - Dead fetus
 - Initially 4 – 8 torr
 - Quickly becomes 0
 - Compromised foal
 - 8 to 20 torr
 - Responding to resuscitation
 - 40 to 60 torr



EXIT Technique

- Drug therapy
 - Catheter through endotracheal tube
 - Epinephrine
 - Vasopressin
 - Naloxone
- Pulse/ECG
- Arterial blood gas
 - Lingual artery



EXIT

Complications

- Esophageal intubation
- Hyperventilation
 - Lower P_{aCO_2} to dangerous levels
 - Hasten demise
 - Differentiate from poor cardiac output
 - Slow ventilation



EXIT

General Anesthesia

- Redirection of placental blood flow to the lungs
- Decrease in placental blood flow
 - Associated with rise in fetal PO_2
 - O_2 Rx
 - Decrease transfer of anesthetic agents/other drugs
 - Reduction in neonatal depression after delivery



Referral Centers Dystocia Teams

- Limiting factor - travel distance
- Possible role for EXIT
 - Maintain fetal viability during shipment
- Increase successful referral radius
- Endotracheal tube and a self-inflating bag
 - Oxygen not necessary
 - Carbon dioxide detector
 - Useful but not necessary

EXIT

Summary

- Luxury of time to correct the dystocia
- Assess fetal viability
- Rescue foals during dystocia
- Decrease the impact of anesthesia





