There is significant evidence for the positive effects of delayed cord clamping, a practice which facilitates optimal iron stores for infants. The WHO recommends delayed cord clamping unless the infant needs immediate medical attention. The American College of Obstetrics and Gynecologists (ACOG) recommends delayed cord clamping for all healthy infants for at least 30-60 seconds after birth given the numerous benefits to most newborns. The American Academy of Pediatrics (AAP) endorses the ACOG recommendations. Each facility is encouraged to look at the circumstances within their institution and determine if they are able to provide delayed umbilical cord clamping safely.

Health Benefits of Delayed Cord Clamping:

Term Infants
• Higher hemoglobin levels in early neonatal period
• Lower rates of anemia at 4 months of age
• Higher ferritin levels at 2-4 months of age
• Higher iron stores at 2-4 months of age
• Increased transfer of vital stem cells

Preterm Infants
• Improved transitional circulation
• Better establishment of red blood cell volume
• Decreased need for blood transfusion
• Lower incidence of necrotizing enterocolitis and intraventricular hemorrhage

Early vs. Delayed Cord Clamping
In terms of immediate postpartum events, no significant difference was found in the following outcomes when comparing early vs. delayed cord clamping:
• Postpartum hemorrhage (≥500 mls) or severe postpartum hemorrhage (≥1000 mls)

• Need for maternal blood transfusions
• Maternal retained placenta
• Infant Apgar scores, need for resuscitation, or umbilical cord pH values
• Frequency of neonatal respiratory distress
• Incidence of neonatal polycythemia, severe intraventricular hemorrhage or periventricular leukomalacia

Considerations regarding Delayed Cord Clamping after birth

• There is a small increase in the incidence of jaundice that requires phototherapy in term infants undergoing delayed umbilical cord clamping. Consequently, obstetric care providers adopting delayed umbilical cord clamping in term infants should ensure that mechanisms are in place to monitor and treat neonatal jaundice.
• Delayed umbilical cord clamping does not increase the risk of postpartum hemorrhage.
Delayed Cord Clamping:
A Guide for Healthcare Professionals

Regarding Umbilical Cord Blood Banking

• The current indications for cord blood transplant are limited to select genetic, hematologic, and malignant disorders.

• Umbilical cord blood collection should not compromise obstetric or neonatal care or alter routine practice for the timing of umbilical cord clamping.

• As a variety of circumstances may arise during the process of labor and delivery that may preclude adequate collection, it is important to obtain well-documented informed consent that various medical circumstances of the mother or the neonate may prevent umbilical cord blood collection.

• Some states have passed legislation requiring physicians to inform their patients about umbilical cord blood banking options. Consult state medical associations for more information regarding state laws.

• Physicians or other professionals who recruit families for for-profit umbilical cord blood banking should disclose any financial interests or other potential conflicts of interest.

• The routine storage of umbilical cord blood as “biologic insurance” against future disease is not recommended.

• If a patient requests information on umbilical cord blood banking, balanced and accurate information regarding the advantages and disadvantages of public and private umbilical cord blood banking should be provided.

• Patients should be aware that in certain instances, use of one’s own stem cells is contraindicated.

• Counseling should include disclosure that the chance a child or family member develops a condition that could be treated with an autologous transfusion of umbilical blood is rare.

REFERENCES:


