

## Immediate or Delayed Cord Clamping?

### Making a decision

Inception Lifebank believes that it is our responsibility to help inform parents in an honest, balanced and unbiased manner and by doing so, to equip parents with the knowledge to act in the best interests of their baby and other loved ones, now and for the future.

There remains a debate about when the cord blood should be collected with some recommending immediate clamping of the umbilical cord to optimize the number of stem cells collected, while others recommend delayed clamping to optimize the volume of blood entering the newborn's circulation. This disagreement often causes confusion for expectant parents who obviously want to do what is best for their baby at birth, but also wish to safeguard their baby's future health or even other family members who might one day require a treatment using stem cells. The confusion is further compounded by there currently being no set definition of "delayed" cord blood clamping and clamping times vary significantly between studies.<sup>1</sup>

### A survey of medical literature revealed the following conclusions:

| WHAT YOU MAY BE TOLD  | PROS   | CONS  |
|---|--|---|
| Delayed clamping allows up to 30-40mls (10-15ml/kg) of blood to return to baby's circulation. | Studies suggest infants at risk of anemia, due to malaria or poor maternal nutrition in resource poor settings, or where there is a low birth weight, or premature delivery, would benefit. <sup>2</sup> | Studies suggest that healthy full term infants, not at risk of anemia, may be adversely affected due to possible blood overload and jaundice. <sup>3</sup>    |
| Delayed clamping increases the risk of post-partum hemorrhage.                                | The World Health Organization and others recommend "active management" of the third stage of labor to reduce maternal blood loss. This includes early cord blood clamping. <sup>4, 5</sup>               | Other studies have shown that there is no increased risk of post-partum hemorrhage when the clamping of the cord is delayed. <sup>3</sup>                     |
| Delayed clamping reduces the volume of cord blood collection.                                 | Immediate clamping within 60 seconds has been reported to improve collection volume. <sup>6</sup>  | Inception's experience is that clamping within 2 min provides opportunity for an adequate collection volume.  |
| Delayed clamping in babies with very low birth weights will help with infant development.     | Male babies born between 24 and 31 weeks, where there was immediate clamping (within 30 secs) have been found to be at risk of delayed motor skill development up to 7 months. <sup>7</sup>              | The same study by Mercer found that delaying clamping, up to 45 seconds, provided protection against delayed development to low birth weight male babies.     |
| Delaying until the cord stops pulsing before clamping, is of benefit to mother and the baby.  | If the parents have chosen not to collect and save the cord blood stem cells, then delaying until cord pulsation ceases, provides for a more natural childbirth.   | Delaying clamping beyond 60 -90 seconds has been reported found to be of little benefit in returning additional blood to the baby's circulation. <sup>8</sup> |

### Professional advice from our Medical Director, Dr. Robert Casper

- Delayed clamping of the cord will increase blood going to the baby but will decrease the volume of blood left in the cord for collection.
- Delayed clamping is likely not that beneficial for healthy full term babies.
- The real benefit of delayed cord clamping would be in premature or small for dates babies or if the mother is anemic.
- We would not suggest delayed clamping if you want to maximize the

amount of cord blood collected but for most healthy babies it is probably not a problem whatever you decide.

- If the baby is small or premature, the delayed clamping should be done to maximize the baby's blood volume and iron stores, and cord blood collection should be a secondary concern.
- Your attending Physician will not collect the cord blood if it puts your health or the health of your baby at risk.

### References

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