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Umbilical cord clamping should be delayed, says expert

Editorial: Umbilical cord clamping after birth BMJ Volume 335 pp 312-3

Clamping and cutting of the umbilical cord should be delayed for three minutes after birth, particularly for pre-term infants, suggests a senior doctor in this week's BMJ.

Early clamping and cutting of the umbilical cord is widely practised as part of the management of labour, but recent studies suggest that it may be harmful to the baby. The rate of early cord clamping varies widely in Europe, from 17% of units in Denmark to 90% in France.

So Dr Andrew Weeks, a senior lecturer in obstetrics at the University of Liverpool, looked at the evidence behind cord clamping.

For the mother, trials show that early cord clamping has no ill effects, he writes. But what about the baby?

At birth, he says, the umbilical cord sends oxygen-rich blood to the lungs until breathing establishes. So as long as the cord is unclamped, the average transfusion to the newborn is equivalent to 21% of the neonate's final blood volume and three quarters of the transfusion occurs in the first minute after birth.

For babies born at term, the main effect of this large autotransfusion is to increase their iron status. This may be lifesaving in areas where anaemia is endemic.

In the developed world, however, there have been concerns that it could increase the risk of polycythaemia and hyperbilirubinaemia (abnormally high levels of red blood cells and bile pigments in the bloodstream, often leading to jaundice). But trials show this is not the case.

For pre-term babies the beneficial effects of delayed clamping may be greater, he says. Although the studies are smaller, delayed clamping is consistently associated with reductions in anaemia, bleeding in the brain (intraventricular haemorrhage), and the need for transfusion.

So how should we approach cord clamping in practice, he asks?

In normal deliveries, delaying cord clamping for three minutes with the baby on the mother's abdomen should not be too difficult.

The situation is a little more complex for babies born by caesarean section or for those who need support soon after birth. Nevertheless, it is these babies who may benefit most from a delay in cord clamping. For them, a policy of 'wait a minute' would be pragmatic, he says.

There is now considerable evidence that early cord clamping does not benefit mothers or babies and may even be harmful, he writes. Both the World Health Organisation and the International Federation of Gynecology and Obstetrics (FIGO) have dropped the practice from their guidelines.

It is time for others to follow their lead and find practical ways of incorporating delayed cord clamping into delivery routines, he concludes.