



Service Priorities and Programmes
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Delayed cord clamping in premature neonates

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Introduction

After birth, early umbilical cord clamping (<20 seconds after birth) has been a routine for decades. Recent evidence reveals delayed cord clamping (30 seconds or more after birth) allows blood flow between the placenta and neonate. It may relate to better blood pressure, less blood transfusion, less intraventricular hemorrhage (IVH) and necrotizing enterocolitis (NEC) in the premature neonates.

Objectives

- To provide evidence based recommendation on time of cord clamping in premature neonates - To assess the effects of delayed cord clamping for neonates from 32 to 35 weeks 6 days gestation

Methodology

With a joint protocol, this quality improvement project was launched on 11 November 2013. Singleton vaginal births from 32 to 35+ 6 week gestation age are assessed for delayed cord clamping. Exclusion criteria also include neonates with major congenital anomalies; asphyxia; requiring immediate resuscitation; tight nuchal cord; born by mothers with diabetes; placenta praevia; pre-eclampsia; postpartum haemorrhage, and condition which deems unsuitable. During the hospital stay, the following parameters of neonates are documented: haemoglobin level; blood pressure (BP); needs for normal saline (NS) bolus or inotrope; early neonatal jaundice (NNJ) within 1st 24 hours; any phototherapy or exchange transfusion; blood transfusion; IVH and NEC.

Result

57 babies of the specified gestation were born from 11 Nov 2013 to 31 Jan 2014. 42 were excluded according to the exclusion criteria. 3 babies were left out as staff were busy and 1 was not done as mother was not co-operative. 11 eligible neonates had delayed cord clamping performed. The Haemoglobin level ranged from 12.9 to 22.1g/dL, 3 babies had level >20g/dL. None of them required blood transfusion. Blood pressure was checked in 10 babies. The systolic BP ranged from 50 to 79 mmHg and the mean BP 38 to 62 mmHg. None required NS bolus or inotropes. 6 babies (55%)

had early NNJ and 10 babies (91%) had jaundice within 1st week, only phototherapy was needed. 1 out of the 9 babies with ultrasound brain had grade 1 IVH. No baby suffered from NEC. - Conclusion Delayed cord clamping is well tolerated in 32 to 35+6 week babies with no major side effects.