Stopping enteral feeds for prevention of transfusion-associated necrotising enterocolitis in preterm infants

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ABSTRACT

Background
Feeding practices around the time of packed red blood cell transfusion have been implicated in the subsequent development of necrotising enterocolitis (NEC) in preterm infants. Specifically, it has been suggested that withholding feeds around the time of transfusion may reduce the risk of subsequent NEC. It is important to determine if withholding feeds around transfusion reduces the risk of subsequent NEC and associated mortality.

Objectives
- To assess the benefits and risks of stopping compared to continuing feed management before, during, and after blood transfusion in preterm infants
- To assess the effects of stopping versus continuing feeds in the following subgroups of infants: infants of different gestations; infants with symptomatic and asymptomatic anaemia; infants who received different feeding schedules, types of feed, and methods of feed delivery; infants who were transfused with different blood products, at different blood volumes, via different routes of delivery; and those who received blood transfusion with and without co-interventions such as use of diuretics
- To determine the effectiveness and safety of stopping feeds around the time of a blood transfusion in reducing the risk of subsequent necrotising enterocolitis (NEC) in preterm infants

Search methods
We used the standard search strategy of Cochrane Neonatal to search the Cochrane Central Register of Controlled Trials (CENTRAL; 2018, Issue 11), in the Cochrane Library; MEDLINE (1966 to 14 November 2018); Embase (1980 to 14 November 2018); and the Cumulative Index to Nursing and Allied Health Literature (CINAHL; 1982 to 14 November 2018). We also searched clinical trials databases, conference proceedings, and reference lists of retrieved articles for randomised controlled trials (RCTs), cluster-RCTs, and quasi-RCTs.

Selection criteria
Randomised and quasi-randomised controlled trials that compared stopping feeds versus continuing feeds around the time of blood transfusion in preterm infants.