

To₂rpido Study

Targeted oxygenation in the resuscitation of premature infants and their developmental outcome

For more than 100 years, health professionals have used 100% oxygen to help newborn babies breathe (resuscitation). Oxygen is necessary for life, but either too much or too little of it may harm a baby's eyes, lungs and brain. Currently, we do not know what the 'right amount' of oxygen should be during those important first few minutes of a newborn infant's life. New studies show that using air (21% oxygen) instead of pure (100%) oxygen during the resuscitation of sick full term infants is just as good as using 100% oxygen and in fact may reduce the risk of death of the babies by more than 30%. However, no good studies have been done on premature babies yet and because many premature babies need extra oxygen because of immature lungs, finding a solution to this question is of the utmost importance.

Aim

To determine the outcome of very premature infants (< 30.6 weeks gestation) who have had resuscitation at birth starting with either room air or 100% oxygen.

What does the study involve

At randomisation infants will either receive air or oxygen at resuscitation, then titrated according to need.

Cord Blood at delivery. Infant blood samples for markers of oxidative stress at 2 and 12hrs. Medical history. Developmental Assessment at 2yrs corrected gestation.

Contacts

This is a multicentre, multinational study currently set up in Australia, Malaysia, and Singapore and with centres starting in India. It is organised out of Royal Hospital for Women, in Sydney, by Dr Julee Oei

For more information contact::

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