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7º Jornadas Interdisciplinarias de Seguimiento del Recién Nacido de Alto Riesgo
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1º Jornadas Argentinas de Enfermería Neonatal
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9º Reunión Nacional de Prevención de la Ceguera en la Infancia por ROP
Jornada de Formación de Instructores de Reanimación Cardiopulmonar Neonatal

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Sede: Centro de Docencia y Capacitación Pediátrica Dr. Carlos A. Gianantonio - Salguero 1244 - Ciudad de Buenos Aires

Conferencia: CAMBIOS EN LOS CUIDADOS INTENSIVOS PERINATALES Y SU IMPACTO EN LOS ÚLTIMOS 50 AÑOS

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Prior to the 1950s there were few survivors <1500 g or <32 weeks as most very preterm or very low birthweight babies died from severe respiratory distress, caused by a lack of surfactant.

Oxygen was introduced into nurseries, primarily to reduce apnoea, but it led to an epidemic of blindness. When oxygen use was subsequently curtailed, mortality rates from severe respiratory distress rose, as did cerebral palsy rates in survivors. As the technology to measure oxygen in the body improved and targets for oxygen therapy developed, we have now reached a steady-state between mortality and cerebral palsy on the one hand, and blindness on the other.

The ability to support breathing was the next major advance. Once the technological requirements for ventilators between babies and adults were understood, assisted ventilation improved survival rates.

Despite assisted ventilation, a lack of surfactant was still the primary cause of death of preterm infants. In the 1960s, an obstetrician in New Zealand, Graham (Mont) Liggins, was investigating how to induce labour in sheep. Following from his animal observations, the first human trial of antenatal corticosteroids demonstrated a reduction in respiratory distress and mortality, which was confirmed in many other subsequent trials. Later in the 1970s and 1980s, exogenous surfactant therapy was developed, which further decreased the severity of respiratory distress after birth, and also improved survival rates.

With the ability to improve outcomes for very preterm babies, the next major advance was the increased application of the techniques of intensive care, both before and after birth, and an increased willingness to treat more very preterm babies.

Once survival rates began to improve, several teams around the world recognised the need to evaluate outcomes beyond hospital discharge, and the first of many long-term follow-up studies evolved. As outcomes have changed over time, the need for further long-term studies has increased, not diminished.

More recently several treatments have been shown to improve long-term outcomes for very preterm babies, including magnesium sulphate before birth, and caffeine after birth.

In summary, perinatal intensive care for very preterm infants has evolved dramatically over the last 50 years, as have the outcomes for the babies offered this care.