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Background
During the last two decades of the 20th century (1980 – 2000) there have been huge improvements in the care of sick newborn children in high income countries, and these improvements have resulted in improved survival of newborns. However, the proportion of newborns who develop cerebral palsy in these countries has been remarkably stable during the same time period. Some studies have even found that the occurrence is decreasing. Most of these studies have reported that between 3 and 10 out of 100 newborns are born four to eight weeks before term (at 32-36 weeks of pregnancy) or with a birth weight between 1500 and 2500 grams. These children have an increased risk of getting CP compared with children born at term, and they account for 15 to 24 out of every 100 children with CP.

What was the aim?
This paper describes the trends in occurrence of cerebral palsy from 1980 to 1998 in Europe among children born at 32-36 weeks of pregnancy or with a birth weight between 1500 and 2500 grams.

How was the work carried out?
We used the Surveillance of Cerebral Palsy in Europe’s (SCPE) database to obtain data on 1,164 children born at 32-36 weeks of pregnancy with CP, and on 2,159 children with birth weight between 1500 and 2500 grams with CP. This includes data from 19 CP registers in Europe. The children were born between 1980 and 1998.
What were the findings?
We found that the proportion of children born between weeks 32-36 of pregnancy who got CP decreased by approximately 3 in every 100 per year during the study period. This decrease was mainly found among children with the spastic bilateral CP subtype (this subtype is considered to be the typical outcome of preterm birth). However, we did not find a corresponding decrease in occurrence among children with a birth weight between 1500-2499 grams, although fewer children got the most severe CP subtypes.

What does this tell us?
The results show that the observed improvement in survival in these high risk groups of children during the last two decades of the last century has not resulted in an increased occurrence of cerebral palsy. In fact, our results suggest that it may have led to a slight, but significant reduction of children with CP among those born moderately preterm.

Paper

Pubmed abstract The summary of this study can be found in Pubmed, a database of citations from biomedical journals. http://www.ncbi.nlm.nih.gov/pubmed/21838820

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