

Long-term impact of pre-incision antibiotics on children born by caesarean section: a longitudinal study based on UK electronic health records

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Plain English summary

Impact of pre-incision antibiotics for caesarean section

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Plain English summary

What was the question?

Women giving birth by caesarean section are at risk of developing infections (such as wound infections) and are offered antibiotics at the time of their operation to reduce this risk. In 2011, the national guidelines changed from recommending antibiotics after cord clamping to giving them before the operation to further reduce the risk of maternal infection. During birth, the newborn gut is colonised by microbes. Antibiotics given to the mother before caesarean section can reach the baby through the placenta and disrupt the normal microbes that colonise the gut. These microbes are believed to play a role in the development of the immune system and altering the normal development of these microbes has been linked to children developing allergic conditions, such as asthma and eczema. This study investigated whether or not giving antibiotics before the caesarean section had a longer-term impact on children's health.

What did we do?

We used routine NHS information already collected by hospitals and general practitioners about women who gave birth in the UK between 2006 and 2018, and their children. We compared the risk of asthma, eczema and other health conditions in the first 5 years after birth in children born by caesarean section before and after the change in hospital policies. We also compared their health with children born vaginally.

What did we find?

We found that there was no increased risk of asthma or eczema for children born by caesarean section after the policy decision in 2011 to give the mother antibiotics before the operation.

What does this mean?

The study findings provide further evidence for the current recommendation to give preventative antibiotics to women shortly before the caesarean section to reduce the overall risk of infections after birth.

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This report

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