

Parent-determined oral montelukast therapy for preschool wheeze with stratification for arachidonate 5-lipoxygenase (*ALOX5*) promoter genotype: a multicentre, randomised, placebo-controlled trial

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Plain English summary

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Plain English summary

Background

Young children who wheeze can become very ill and may require large amounts of care from their families, doctors and nurses. No treatment has been shown to work very well for these children. Montelukast is an established medicine that is safe and easy to give to children.

What did we want to find out?

We wanted to see if montelukast might help in this group of children. We wanted to see whether or not children with slightly different genes might do better with montelukast than others.

What did we do?

We ran a research study comparing montelukast with a dummy medicine (referred to as placebo). We gave parents a box of medicine but did not tell them whether it was montelukast or placebo. We asked them to start giving it to their child as soon as a cold or wheezing episode began and to continue it for 10 days. We measured the number of times children needed to see a doctor or nurse in an unplanned way over the following year.

What did we find?

Montelukast did not seem to help young wheezing children any more than placebo did. It might have worked better in children with slightly different genes but we could not be certain from this study.

What does this mean?

Montelukast does not seem to be helpful for all young children who wheeze. We need to do another study to see if it really does work better in the group of children with slightly different genes.

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