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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Declared competing interests of authors: Jonathan Grigg received personal fees for Advisory Board membership for new asthma treatments in children from GlaxoSmithKline, Boehringer Ingelheim and Novartis Pharmaceuticals while the study was being done. David Price has received fees paid to Research in Real Life Ltd (RIRL) for Board membership from Aerocrine, Almirall, Amgen, AstraZeneca, Boehringer Ingelheim, Chiesi, Meda, Mundipharma International Ltd, Napp, Novartis Pharmaceuticals and Teva; for consultancy fees from Almirall, Amgen, AstraZeneca, Boehringer Ingelheim, Chiesi, GlaxoSmithKline, Meda, Mundipharma International Ltd, Napp, Novartis Pharmaceuticals, Nycomed, Pfizer and Teva; for grants (received or pending) from Aerocrine, AstraZeneca, Boehringer Ingelheim, Chiesi, GlaxoSmithKline, Meda, Merck Sharp & Dohme Ltd, Mundipharma International Ltd, Novartis Pharmaceuticals, Nycomed, Orion, Pfizer, Takeda, Teva and Zentiva; for lecture and speaking engagements from Almirall, AstraZeneca, Boehringer Ingelheim, Chiesi, Cipla, GlaxoSmithKline, Kyorin, Meda, Merck Sharp & Dohme Ltd, Mundipharma International Ltd, Novartis Pharmaceuticals, Pfizer, SkyPharma, Takeda and Teva; for manuscript preparation from Mundipharma International Ltd and Teva; for travel, accommodation and meeting expenses from Aerocrine, Boehringer Ingelheim, Mundipharma International Ltd, Napp, Novartis Pharmaceuticals and Teva; for patient enrolment or completion of research from Almirall, Chiesi, Teva and Zentiva; for contract research from Aerocrine, AKL Research and Development Ltd, Almirall, Boehringer Ingelheim, Chiesi, Meda, Mundipharma International Ltd, Napp, Novartis Pharmaceuticals, Orion, Takeda
and Zentiva; has an AKL Research and Development Ltd patent pending; and has shares in AKL Research and Development Ltd, which produces phytopharmaceuticals and owns 80% of RIRL and its subsidiary social enterprise, Optimum Patient Care.

Published November 2015
DOI: 10.3310/eme02060

Plain English summary

Oral montelukast therapy for preschool wheeze
Efficacy and Mechanism Evaluation 2015; Vol. 2: No. 6
DOI: 10.3310/eme02060

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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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This report
The research reported in this issue of the journal was funded by the EME programme as project number 08/43/03. The contractual start date was in November 2009. The final report began editorial review in January 2015 and was accepted for publication in June 2015. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The EME editors and production house have tried to ensure the accuracy of the authors’ report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

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