

LETTERS

MACROLIDES AND INFANTILE HYPERTROPHIC PYLORIC STENOSIS

The difficulty in evaluating all findings in study on use of macrolides in mother and child and risk of infantile hypertrophic pyloric stenosis

Frank de Vries *pharmacoepidemiologist*

Utrecht Institute for Pharmaceutical Sciences, Universiteitsweg 99, Utrecht, the Netherlands

Lund and colleagues report a 30-fold risk of infantile hypertrophic pyloric stenosis with the use of macrolide antibiotics during the first 0-13 days of a child's life.¹ This is either a very strong association or too good to be true.

The authors used the Danish national databases, which linked the dispensing of drugs from community pharmacies to surgical procedures and diagnoses as recorded in hospitals. Drug exposure is only recorded when a patient has a CPR number—the Danish national identification number.² According to Danish law, parents should register their newborns within 14 days after birth, after which a CPR number will be assigned.³ Generally, deliveries in hospitals are assigned a CPR number within 1-2 days, but for home deliveries this might take up to 14 days—exactly the time window of interest in this study. As long as newborns have no CPR number, their mother's CPR number is often used to claim back drugs, which makes this data source less suitable to study a mother's exposure to drugs during the first 14 days of her baby's life.

In addition, there is potential for another type of distortion: babies who have been delivered in hospitals will be more likely to have recordings of any drugs given during the first 14 days of their life compared with babies who were born at home. Without having seen the data or any sensitivity analyses to evaluate potential differential misclassification of exposure, it is difficult to adequately evaluate all findings in this study that relate to effects of drugs during the first 0-13 days of a baby's life—or his or her mother.

Competing interests: None declared.

- 1 Lund M, Pasternak B, Davidsen RB, Feenstra B, Krogh C, Diaz LJ, et al. Use of macrolides in mother and child and risk of infantile hypertrophic pyloric stenosis: nationwide cohort study. *BMJ* 2014;348:g1908. (11 March.)
- 2 Borger.dk (citizen.dk). www.borger.dk/Sider/foedselsregistrering.aspx.
- 3 Regionmidtjylland midt. (regional website for health and social services). https://e-dok.rm.dk/e-dok/e_hove_klko.nsf/UI2/229E35C0DAEABE3C1256F47004A207E?OpenDocument.

Cite this as: *BMJ* 2014;349:g5201

© BMJ Publishing Group Ltd 2014