Associations between genetic variation and immune response in infants with respiratory syncytial virus (RSV) lower respiratory tract infection (LRTI)

Published: 24-07-2007
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Determine associations between genetic variation and immune response in nasopharyngeal aspirates of infants with RSV LRTI.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Viral infectious disorders
Study type	Observational non invasive

Summary

ID

NL-OMON31227

Source
ToetsingOnline

Brief title
RSV genetics study

Condition

- Viral infectious disorders
- Respiratory tract infections

Synonym
lower respiratory tract infection, RSV bronchiolitis

Research involving
Human

Sponsors and support

Primary sponsor: Laboratorium voor Gezondheidsbeschermingsonderzoek

Source(s) of monetary or material Support: Ministerie van VWS aan RIVM en UMC Utrecht

Intervention

Keyword: Bronchiolitis, Cytokines, Nasopharyngeal aspirates, RSV

Outcome measures

Primary outcome

Immunological parameters and genetic polymorphisms

Secondary outcome

Questionnaire data

Study description

Background summary

All children get infected with Respiratory Syncytial Virus (RSV) in the first two years of their lives. Approximately 10% of all children will develop a lower respiratory tract infection (LRTI), 1% needs to be admitted to a hospital. RSV LRTI is an important cause of admission in young children. At risk are premature born babies, young children and children with cardial or pulmonary problems. However, a lot of children who are not at risk will develop a severe RSV LRTI. Earlier published research showed that polymorphisms in immunological genes play an important role in the risk of developing a RSV LRTI. It is not sure if these polylmorphisms cause a different immunological response in the airways during a RSV LRTI.

Study objective

Determine associations between genetic variation and immune response in nasopharyngeal aspirates of infants with RSV LRTI.

Study design

If a child is admitted to the hospital with a LRTI, an undiluted nasopharyngeal aspirate will be collected. Both a RSV test will be done as well as immunological parameters will be measured (IL-4, IL-4R, IL-13, IL-10, IL-8, IFN). Cheekmucosa can give information about genetic polymorphisms which play a

role in RSV LRTI.

Study burden and risks

There is only a minimal risk because there is no extra invasive test necessary.

Contacts

Public
Selecteer

Postbus 1
3720 BA Bilthoven
Nederland
Scientific
Selecteer

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Children (2-11 years)

Inclusion criteria

RSV bronchiolitis in children younger than 13 months of age who are admitted to a hospital.

Exclusion criteria

Airway morbidity in the past, severe heartdisease or severe lungdisease in the past.

Study design

Design

Study type: Observational non invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Basic science

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	15-11-2007
Enrollment:	250
Type:	Actual

Ethics review

Approved WMO Date:	24-07-2007
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)
Approved WMO Date:	10-02-2010
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL17548.041.07