

vIRus In Summer

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON26351

Source

NTR

Brief title

IRIS

Health condition

Human metapneumovirus infection

Sponsors and support

Primary sponsor: Dr. E. R. Heddema, Department of microbiology Zuyderland Medisch Centrum, Heerlen

Source(s) of monetary or material Support: No fundings needed.

Intervention

Outcome measures

Primary outcome

Gain insight into likely shifts in incidence of HMPV, both in children and adults, between 2016 and 2021.

Secondary outcome

- Gain insight in patients admitted with HMPV between 1/6/21 and 1/8/21 as to whether it is 1

cluster of introduction or whether there are multiple genotypes circulating.

- Comparison of clinical manifestations and clinical outcomes of adult patients in June/July 2021 compared to the historical patient cohort from our earlier study.

- Comparison of clinical manifestations and outcomes between children and adults in June/July 2021.

Study description

Background summary

Background: Human metapneumovirus (HMPV) is a virus belonging to the Paramyxoviridae family and has been known since 2001. Symptoms may include wheezing, increased breath effort, and a severe cough. The virus is a known causative agent of pneumonia in both children and the elderly, immunocompromised and it can cause exacerbations in patients with COPD. Studies by our group showed that it can be associated with significant mortality and that the clinical picture in adults is very similar to COVID-19. However, there is an important difference with COVID-19: while COVID-19 shows itself as an erratic pandemic with high peaks and deep drops in incidence, HMPV continued to behave as a purely seasonal virus until 2020 with an annual high incidence in the spring and complete decline in the summer. However, in 2021, after a year of COVID-19 measures, there is evidence that HMPV incidence shifted from spring, in which it was now barely detected, to summer.

Purpose: Through this retrospective subject study, we want to gain insight into suspected shifts in incidence of HMPV, both in children and adults. We also want to gain insight into whether it is 1 cluster of introduction or whether there are multiple genotypes circulating. Finally, we want to compare clinical outcomes of adult patients in June/July 2021 with the previously collected historical cohort, as well as differences between children and adults in June/July 2021.

Methods: This retrospective cohort analysis will look at the incidence of HMPV infection in patients who were admitted to Zuyderland Medical Center between 1/1/16 and 1/8/21. Both children and adults will be included for this purpose.

The cohort of patients admitted between 1/6/21 and 1/8/21 will be studied in more detail. In these cases genotyping of HMPV will be performed and clinical outcomes of patients will be collected. Genotyping will be performed in close collaboration with the Erasmus University. The main clinical outcomes that will be observed are: mortality, ICU admission and length of hospital stay.

Study objective

It is expected to see a shift with respect to the prevalence of HMPV infection compared to previous cohorts.

Study design

T0= hospital admission T1= 30 days after hospital discharge

Contacts

Public

Zuyderland Medical Centre
Christopher Kivit

088 - 459 7777

Scientific

Zuyderland Medical Centre
Christopher Kivit

088 - 459 7777

Eligibility criteria

Inclusion criteria

Patients presented at Zuyderland Medical Center with HMPV infection, as determined by nasopharyngeal swab in which the PCR was positive for HMPV. These included both children and adults.

Exclusion criteria

Absence of nasopharyngeal swab. No informed consent.

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL
Recruitment status: Recruiting
Start date (anticipated): 04-08-2021
Enrollment: 534
Type: Anticipated

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Positive opinion
Date: 04-08-2021
Application type: First submission

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
NTR-new	NL9648
Other	METC Z : METCZ20210130

Study results