Molecular epidemiology of Staphylococcus aureus respiratory cultures in cystic fibrosis patients : a multicenter Belgian study on methicillin sensitive strains (MSSA), methicillin resistant strains (MRSA) and small colony variants (SCVs).

No registrations found.

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

Summary

ID

NL-OMON24120

Source
NTR

Brief title
Staphylococcus study

Health condition

Cystic Fibrosis
Microbiology
Respiratory infection
Staphylococcus aureus
MRSA

Sponsors and support

Primary sponsor: University Hospital Brussels, Cystic Fibrosis Reference Center

Source(s) of monetary or material Support: BCFA = Belgian Cystic Fibrosis Association

Intervention

Outcome measures

Primary outcome

Characterization and molecular typing of S. aureus strains.

Secondary outcome

N/A

Study description

Background summary

Although median survival has increased over the decades from 11 to 37 years, Cystic Fibrosis (CF) remains the most common lethal autosomal recessive disorder. With increasing survival due to improvements of care, especially aggressive pulmonary infection control, we are now faced to an increase in pulmonary infections with changing and resistant pathogens. It is not always well known if these new pathogens also require aggressive infection control, treatment and attempting to eradication. In particular, Staphylococcus aureus was up to now considered as less virulent and less transmissible, however the prevalence of methicillin-resistant S. aureus (MRSA) and the small colony variants (SCVs) has increased over the past decades in the respiratory cultures of CF patients in most countries. Little is known about the risk factors for acquisition of MRSA and SCVs, and the clinical impact of these strains remains uncertain. Molecular typing of the S. aureus and its emerging variant strains in different Belgian centers (that do not share patients) can help to identify pathogenicity and virulence, to understand the risk factors for acquisition of MRSA and the transmission pathways. This can aid the expansion of effective preventive and therapeutic strategies, and can diminish the risk for transmission.

Study objective

The aim of this study is to determine the prevalence of MSSA, small colony variants (SCVs), and MRSA in the Belgian CF population, to characterize these S. aureus strains, and to identify virulence factors in order to understand the transmission pathways and the risk factors for acquisition of MRSA.

Study design

One respiratory sample will be collected per patient during a routine control visit or a hospitalisation.

Intervention

One respiratory sample (sputum or oropharyngeal swab) will be taken in the ambulatory setting.

Contacts

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Eligibility criteria

Inclusion criteria

Cystic fibrosis patients with S. aureus positive culture.

Exclusion criteria

No S. aureus positive culture.

Study design

Design

Study type: Observational non invasive

Intervention model:	Parallel
Allocation:	Non controlled trial

Control: N/A , unknown

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-10-2012
Enrollment:	500
Type:	Anticipated

Ethics review

Positive opinion

Date:	11-09-2012
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	NL3456
NTR-old	NTR3608
Other	MEC UZ Brussel : 2012/201
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Study results

Summary results
N/A