

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).

Gepubliceerd: 11-09-2012 Laatste bijgewerkt: 18-08-2022

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...

Ethische beoordeling	Positief advies
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON24120

Bron

NTR

Verkorte titel

Staphylococcus study

Aandoening

Cystic Fibrosis

Microbiology

Respiratory infection

Staphylococcus aureus

MRSA

Ondersteuning

Primaire sponsor: University Hospital Brussels, Cystic Fibrosis Reference Center

Overige ondersteuning: BCFA = Belgian Cystic Fibrosis Association

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Characterization and molecular typing of *S. aureus* strains.

Toelichting onderzoek

Achtergrond van het onderzoek

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.

Doel van het onderzoek

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.

Onderzoekopzet

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

hospitalisation.

Onderzoeksproduct en/of interventie

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

Contactpersonen

Publiek

Laarbeeklaan 101
E. Vanderhelst
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Wetenschappelijk

Laarbeeklaan 101
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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Cystic fibrosis patients with *S. aureus* positive culture.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

No *S. aureus* positive culture.

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Parallel
Toewijzing:	N.v.t. / één studie arm
Controle:	N.v.t. / onbekend

Deelname

Nederland	
Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-10-2012
Aantal proefpersonen:	500
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies	
Datum:	11-09-2012
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register

NTR-new

NTR-old

Ander register

ISRCTN

ID

NL3456

NTR3608

MEC UZ Brussel : 2012/201

ISRCTN wordt niet meer aangevraagd.

Resultaten

Samenvatting resultaten

N/A