Lung ultrasound (LUS) as a tool to determine the clinical course in COVID-19 patients

No registrations found.

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

Summary

ID

NL-OMON26808

Source
Nationaal Trial Register

Brief title
LUS-CC

Health condition

SARS-CoV2 infection

Sponsors and support

Primary sponsor: Radboudumc
Source(s) of monetary or material Support: Radboudumc

Intervention

Outcome measures

Primary outcome

Patients will receive regular care as indicated by the treating physician. LUS is performed immediately in the Emergency Department or after admissionto the hospital. SARS-CoV-2 PCR testing will be performed along with standard laboratory testing and other

microbiological tests to detect pathogens that cause respiratory tract infection.CT-scan during admission is only performed if this is clinically indicated or protocol during COVID outbreak.

Secondary outcome

•CT report by radiologist(CORADSscore)•
Laboratory results including flocked swab and COVID-19 PCR.•
Laboratory investigations: as determined by the local department, but at least: oCRP, d-dimer, troponin, ferritin, LDH, lymphopenia, NT-proBNP•
LUS results data for 12locations with scoring systemof LUS•Final diagnosis at discharge •
Clinical outcome:discharge, death, IC admission•
Hospitalization days and ICU admission days, number of days on mechanical ventilation

Study description

Background summary

Infections with the SARS-CoV2 virus often leads to a pneumonia; this pneumonia is visible with Lung UltraSound (LUS). In daily patient care it is hard to measure the severity of the pneumonia; CRP and other biomarkers are traditionally used for determining the prognosis of patients and lead therapeutic decisions. In this study we investigate whether daily LUS can help in prognostication of the clinical course of the patient and support clinical decisions. Furthermore, we will compare our results with traditional biomarkers. patients will undergo a daily LUS. The progression of pneumonia will be determined with the Lung Aeration Score.

Study objective

The objective of this study is delineating the role of pulmonary ultrasound in determining the clinical course in COVID-19 patients

Study design

every month

Intervention

Lung Ultrasound

Contacts

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Eligibility criteria

Inclusion criteria

Age (≥18 years)
Proven(PCR) or suspected (based on clinical signs and imaging) COVID-19 infection-
Referral or admission for internal, emergency or respiratory medicine-
Certified sonographerpresent

Exclusion criteria

-Pre-existing pulmonary disease or heart failure
-Absence of COVID infection

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):	15-03-2020
Enrollment:	20
Type:	Anticipated

IPD sharing statement

Plan to share IPD: No

Ethics review

Positive opinion

Date:	31-03-2020
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	NL8498
Other	METC Radboudumc : 2020-6371

Study results

Summary results

Outcomes of this study will be published in international scientific peer-reviewed journals.