07:28

9748

category

A

agents

(cholera,

plague).

Patients

should

be

placed

in

separate

rooms

or

cohorted

together.

Negative

pressure

rooms

are

not

generally

needed.

The

rooms

and

surfaces

and

equipment

should

undergo

regular

decontamination

preferably

with

sodium

hypochlorite.

Healthcare

workers

should

be

provided

with

fit

tested

N95

respirators

and

protective

suits

and

goggles.

Airborne

transmission

precautions

should

be

taken

during

aerosol

generating

procedures

such

as

intubation,

suction

and

tracheostomies.

All

contacts

including

healthcare

workers

should

be

monitored

for

development

of

symptoms

of

COVID-19.

Patients

can

be

discharged

from

isolation

once

they

are

afebrile

for

atleast

3

d

and

have

two

consecutive

negative

molecular

tests

at

1

d

sampling

interval.

This

recommendation

is

different

from

pandemic

flu

where

patients

were

07:29

~

Oe

948

e

All

clinicians

should

keep

themselves

updated

about

recent

developments

including

global

spread

of

the

disease.

e

Non-essential

international

travel

should

be

avoided

at

this

time.

¢

People

should

stop

spreading

myths

and

false

information

about

the

disease

and

try

to

allay

panic

and

anxiety

of

the

public.

Conclusions

This

new

virus

outbreak

has

challenged

the

economic,

medical

and

public

health

infrastructure

of

China

and

to

some

extent,

of

other

countries

especially,

its

neighbours.

Time

alone

will

tell

how

the

virus

will

impact

our

lives

here

in

India.

More

so,

future

outbreaks

of

viruses

and

pathogens

of

zoonotic

origin

are

likely

to

continue.

Therefore,

apart

from

curbing

this

outbreak.

efforts

should

be

made

to

CoV

lethal

challenge.

Such

antibodies

may

play

a

crucial

role

in

enhancing

protective

humoral

responses

against

the

emerging

CoVs

by

aiming

appropriate

epitopes

and

functions

of

the

S

protein.

The

cross-neutralization

ability

of

SARS-CoV

RBD-

specific

neutralizing

MAbs

considerably

relies

on

the

resemblance

between

their

RBDs;

therefore,

SARS-CoV

RBD-specific

antibodies

could

cross-

neutralized

SL

CoVs,

1.e.,

bat-SL-CoV

strain

WIV1

(RBD

with

eight

amino

acid

differences

from

SARS-

CoV)

but

not

bat-SL-CoV

strain

SHC014

(24

amino

acid

differences)

(200).

Appropriate

RBD-specific

MAbs

be

recognized

by

a

relative

analysis

of

RBD

of

SARS-

CoV-2

to

that

of

SARS-CoV,

and

cross-neutralizing

SARS-CoV

RBD-specific

MAbs

could

be

explored

for

their

effectiveness

against

COVID-19

and

further

need

to

be

assessed

clinically.

The

USS.

biotechnology

company

Regeneron

is

attempting

to

recognize

potent

and

specific

MAbs

to

combat

COVID-19.

An

ideal

therapeutic

option

suggested

for

SARS-CoV-2

(COVID-19)

is

the

combination

therapy

comprised

of

MAbs

and

the

drug

remdesivir

(COVID-19)

(201).

The

SARS-CoV-specific

human

MAb

CR3022

is

found

to

bind

with

SARS-CoV-2

RBD,

indicating

its

potential

as

a

therapeutic

agent

virulence

of

coronaviruses

due

to

changes

in

morphology

and

tropism

(54).

The

E

protein

consists

of

three

domains,

namely,

a

short

hydrophilic

amino

terminal,

a

large

hydrophobic

transmembrane

domain,

and

an

efficient

C-terminal

domain

(51).

The

SARS-CoV-2

E

protein

reveals

a

similar

amino

acid

constitution

without

any

substitution

(16).

N

Protein

The

N

protein

of

coronavirus

is

multipurpose.

Among

several

functions,

it

plays

a

role

in

complex

formation

with

the

viral

genome,

facilitates

M

protein

interaction

needed

during

virion

assembly,

and

enhances

the

transcription

efficiency

of

the

virus

(55,

56).

It

contains

three

highly

conserved

and

distinct

domains,

namely,

an

NTD,

an

RNA-binding

domain

or

a

linker

region

(LKR),

and

a

CTD

(57).

The

NTD

binds

with

the

3’

end

of

the

viral

genome,

perhaps

via

electrostatic

interactions,

and

is

highly

diverged

both

in

length

and

sequence

(58).

The

charged

LKR

is

serine

and

arginine

rich

and

is

also

known

as

the

SR

(serine

and

arginine)

domain

(59).

The

LKR

is

capable

of

direct

interaction

with

in

vitro

RNA

interaction

and

is

responsible

for

cell

signaling

(60,

61).

It

also

modulates

the

antiviral

response

of

the

host

by

working

as

an

antagonist

for

interferon