



## A Short Note on SARS.Cov.1

**Asmaa Alaa Elbatal\***

*Veterinary Student, Veterinary Medicine Menoufia University, Egypt*

**\*Corresponding Author:** Asmaa Alaa Elbatal, Veterinary Student, Veterinary Medicine Menoufia University, Egypt.

**Received:** September 27, 2022

**Published:** December 09, 2022

© All rights are reserved by **Asmaa Alaa Elbatal**.

### Abstract

- SARS.Cov.1, is a respiratory disease of zoonotic origin, Caused by severe acute respiratory syndrome coronavirus.
- SARS.Cov.1 which is called simply Covid2 was mini epidemic in 2002,2003, outbreaking from China, resulting in 8096 Sars cases and 774 death.

### Introduction

- Headings
- Explanation that [SARS. Cov. 1 =Covid 2] and [SARS. Cov. 2=Covid 19].
- Why did scientists call it "SARS"?(Figure a, b)
- What was the virus, the cause of SARS.Cov.1, its origin and its structure?
- How did scientists find out that virus?
- Information and history of that virus?
- How did infected countries with SARS.Cov.1 tackle that epidemic?
- How did that epidemic "Covid 2" appear and disappear in 8mon only without vaccines?
- Comparative between Covid2 and Covid 19?
- Finally, If Covid2 disappeared, or it may appear again?



**Figure a**



**Figure b**

### Discussion

#### Epidemiology of SARS.Cov.1

- SARS.Cov.1 first occurred in the autumn of 2002, especially in Nov 2002 in Southern China, especially in big market for selling meat in foshan province in Hong Kong.
- Then SARS was transported to Hong Kong.
- Within 11w from the first SARS case in Hong Kong, it had spread to an additional 29 countries.
- The mini pandemic peaked during the last of May 2003, and the last probable case was on 13 Juli 2003.
- The total cases are 8096, 66% of them were from China. The total deaths were 774.
- With 10% death rate. [1]



Figure c

Severe acute respiratory syndrome coronavirus

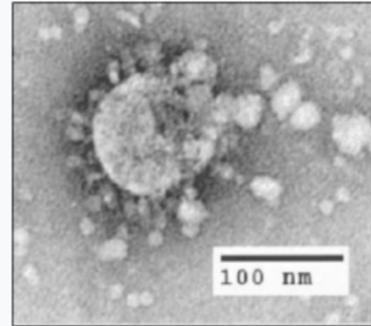


Figure e

Epidemiology diagram of SARS.Cov.1

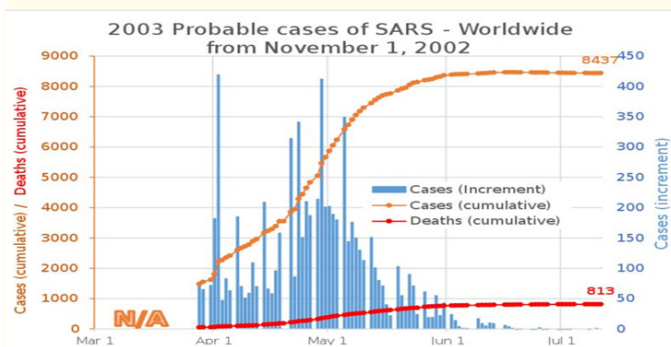


Figure d

Why it was called SARS

The first SARS case was recorded with by WHO Was in Feb 2003, With respiratory syndromes which were

- High fever
- Cough.
- Shortness of breath.
- Difficulty breathing.
- Pneumonia.

WHO and CDC SARS case definition Was

Severe Acute Respiratory Syndromes [1]

How did scientists find out SARS Virus

- Using classical virologic methods, the causative viral agent of SARS was identified in 3 laboratories.

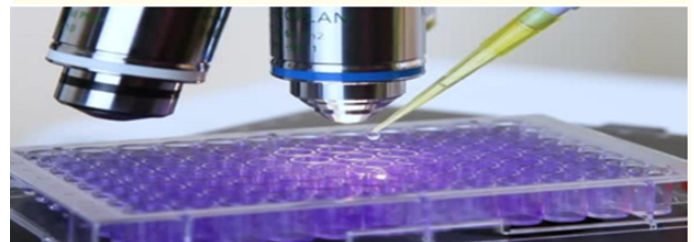


Figure f

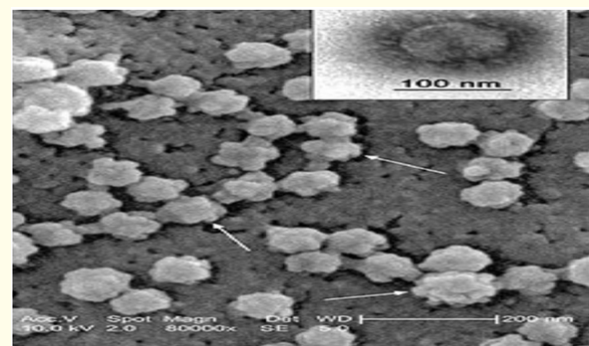


Figure g

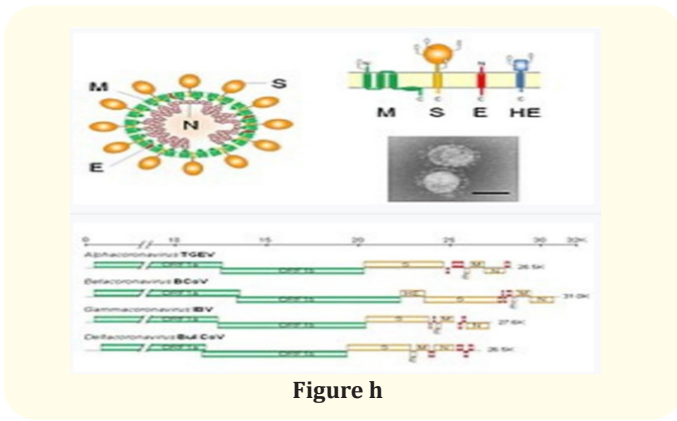


Figure h

Structure of SARS. Cov.1

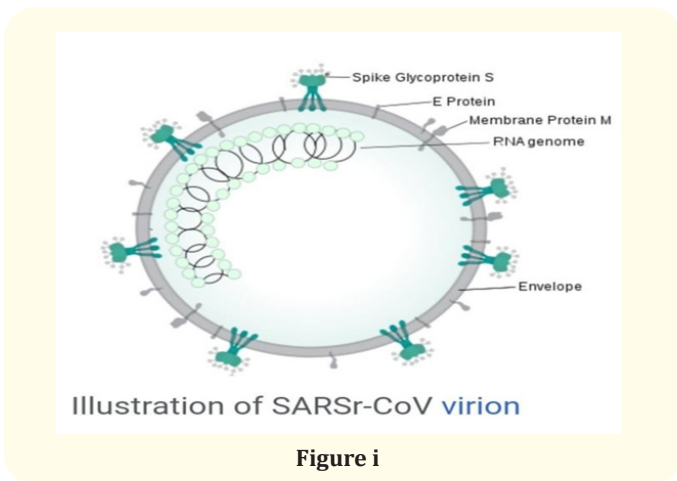


Figure i

Virology

- Attachment R(ACE2), (HE).
- Entry.
- Target. Ex:(Resp. Cells)
- Un coating.
- Nucleic acid (replication)
- Maturation.
- Release from the cell.
- Shedding from the host. 9-Transmission to other hosts.
- Asian palm civets are claimed to be the carrier that transmits SARS from horseshoe bats to human.

Coronaviruses regardless SARS.Cov.1 caught other species

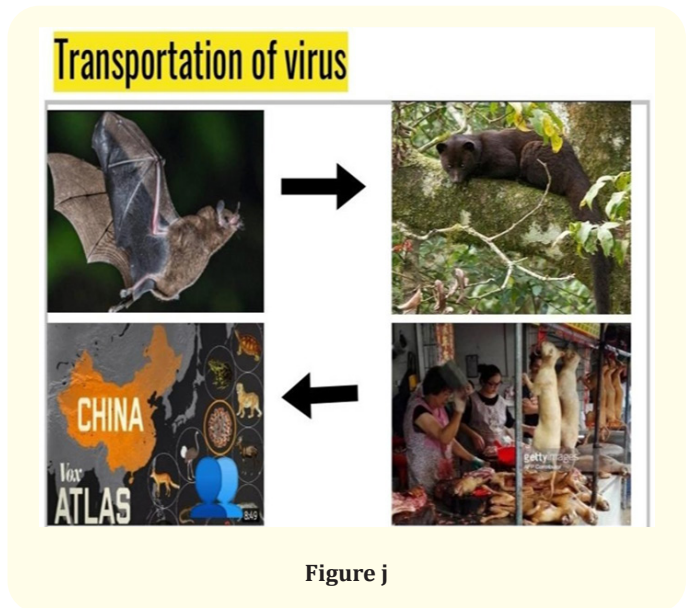


Figure j

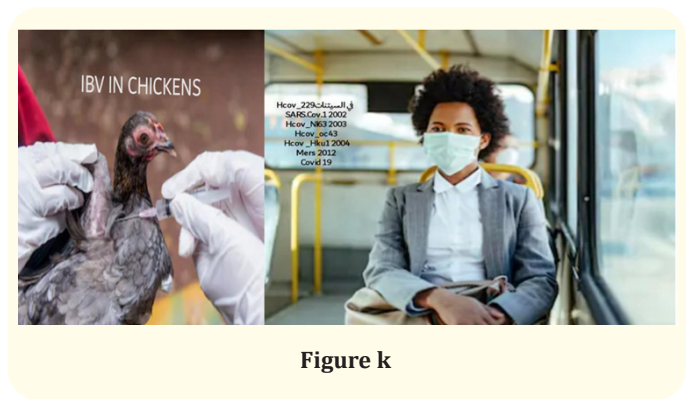


Figure k



Figure l

Tackling with the virus, Treatment and prevention in [2002\_2003]

- Immunity.
- Remedies for Virus signs.
- Face masks, Avoiding closed area.
- Quarantine was highly effective, which explains why didn't spread widely like Covid 19.
- No Vaccines available, till 2020 for SARS.Cov.1.

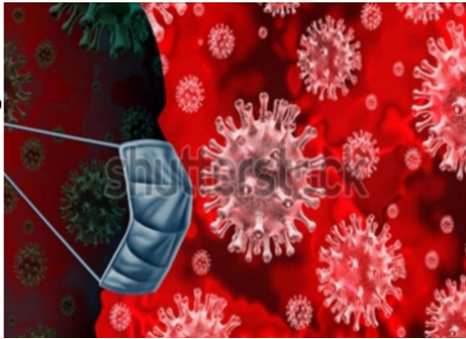


Figure m

Reasons Why SARS.Cov.2 is more contagious than SARS.Cov.1

- Scientists found that because of mutations, the binding from SARS-CoV-2 to the human cell is much stronger compared with SARS-CoV-1.
- This might be one of the reasons why SARS-CoV-2 is spreading much faster and is difficult to control.
- Mechanism of Spike protein attachment in 2 viruses.

According to center for disease control and prevention updates

- No SARS Cases appeared since 2004 till now.

### Conclusion

- SARS.Cov.1 was epidemic disease outbreak in 2002, in 29 countries.
- It's belonging to coronavirus family.
- It wasn't the first one belongs to coronaviruses which caught animals.
- There is no Cases recorded SARS.Cov.1 from 2004 till now.