

A PILOT PROJECT
ON
SEVERE ACUTE RESPIRATORY SYNDROME (SARS)

Introduction

Very recently the disease SARS has posed serious threat in humanity & it has spread to various part of the world and India too. Every day alarming reports are coming with increased mortality & morbidity. The study says the incidence rate is more in China, Indonesia, Japan, Taiwan, Canada etc. Now the particular disease has created a panic not only in these areas but also in rest of the world. This is clear to the virologists that the disease is caused by new family of Corona virus & its clinical feature is clearly documented at various treatment centers. But the pity is that malady for this is still under search. Homoeopathic subtle philosophy advocates high of its effectiveness in controlling viral infection by application of medicine basing on totality of symptoms. So hypothetically clinical features of the disease 'SARS' can be taken as "Totality of the disease" and repertorisation can be made to bring out the medicine as Genus Epidemicus for the disease and a subtle working plan can be formulated basing on that Genus Epidemicus to prevent the disease. When we have availability of these things at our doorstep only we have to accomplish the goal i.e. by providing homoeopathic medicine to the target population who are exposed to disease individuals & affected areas by undertaking a pilot project for prophylaxis with Homoeopathic medicaments.

Literature Review

Severe Acute Respiratory Syndrome (SARS) is a condition of unknown aetiology that has been described in patients in Asia, North America and Europe. This report summarizes the clinical description of patients with SARS based on information collected since mid February 2003 by the World Health Organisation (WHO), Health Canada and CDC in collaboration with health authorities and clinician in Hong Kong, Taiwan, Bangkok, Singapore, the United Kingdom, Slovenia, Canada and

the United states. This information is preliminary and limited by the broad and necessarily non-specific case detection.

Epidemiology

Geographical distribution – Asia, North America & Europe.

In Asia – China, Indonesia, Japan, Singapore, India.

In India – Mumbai, Kolkata, Pune.

Aetiology

Unknown aetiology. Suspected virus causing this disease belongs to the family of Corona virus.

Age Group

Majority of the patients having SARS are between 25-70 years of age. Few suspected cases among children aged ≤ 15 years.

Incubation Period

The incubation period for SARS is typically 2-7days, however, isolated reports have suggested an incubation period as long as 10 days.

Clinical Features.

The illness begins generally with a prodrome of fever ($>100.4^{\circ}\text{ F}$ [$>38^{\circ}\text{ C}$]). Fever often is high, sometimes is associated with chills & rigors and might be accompanied by other symptoms including headache, malaise and myalgia. At the onset of illness, some persons have mild respiratory symptoms. Typically rash and neurological or gastrointestinal findings are absent; however some patients have reported diarrhea during the febrile prodrome.

After 3-7 days, a lower respiratory phase begins with the onset of a dry, non-productive cough or dyspnoea, which might be accompanied by or progress to hypoxemia.

Investigations

Chest radiograph is normal during the febrile state. In late stage, there is consolidation.

Blood picture:

1. In early course – Absolute lymphocyte count decreased.
2. In peak of respiratory phase – TWBC decreased or normal .(leucopenia in 50% of cases)
 - Thrombocytopenia 50,000 to 1,50,000 / μl .
3. Early in respiratory phase – Elevated creatinine phosphokinase level as high as 3,000/ μl .
 - Hepatic trans aminases increased to 2-6 times normal.
 - Nose & throat swab for corona virus under electron microscope.
 - Genetic analysis says new virus belongs to family of corona virus but differs from previously identified corona virus.
 - Serum antibody tests:
 - Enzyme Immuno Assay (EIA)
 - Indirect Immunofluorescence antibody (IFA)
 - Positive results indicates patient had previous infection

- Reverse transcriptase – polymerase chain reaction

Can detect corona virus RNA in clinical specimens including serum, stool and nasal secretions.

- Virus isolation – Clinical specimens from SARS patients are co-cultured with well characterized cell line.

Aims & Objectives

1. To provide “Genus Epidemicus” / prophylaxis for SARS to close contact individuals .
2. To counsel the individuals regarding hygiene / protective measures to be undertaken.

Setting

Areas with affected persons in hospitals & high risk people from close contacts or those migrated from affected places. Usually the air port areas are the chief places for communication, so these cases are suitable for applying our Genus Epidemicus.

The study will be carried out at those places where people are in close contact with disease individuals. Therefore its prime locations are at International Airports & hospitals admitted with the patients, Seaports.

Materials & methods

1. Case taking: It should be done as per the instructions laid down by Dr. C.F.S. Hahnemann.
2. Selection of Genus Epidemicus: It has been selected on the basis of common clinical symptoms available in SARS affected patients, recorded , documented in various literature. Symptoms taken for the selection of Genus Epidemicus are
 - Fever with Chilliness & rigor
 - Headache
 - Malaise

- Myalgia
- Fever with diarrhoea
- Dyspnoea
- Dry non-productive cough

These symptoms were taken for Repertorisation done by Software Hompath Classic Ver. 8.0.

So from above, we are having two medicines of equal value i.e. Apis mel. and Ars. alb. which claim to be selected as one of the Genus Epidemicus. Hence, it requires logical & scientific distinguishing approaches to find out one drug as Genus Epidemicus. The drug Ars. alb. in comparison to Apis mellifica has got much more physiological as well as seat of action on upper & lower respiratory tract tissues and it is a leading drug among the group indicated. Hence, it is logically & scientifically established to choose Arsenic alb. as the Genus Epidemicus (preventive).

Study of Materia Medica

After going through the material medica vividly the indication of Genus Epidemicus are:

- Dyspnoea / cough < by lying down on back & midnight
- Expectoration scanty & frothy.
- Darting pain in upper third of right lung.
- Cough < drinking
- Burning in chest
- Fever midnight aggravation
- Thirst at frequent interval for small quantities of water
- Restlessness
- Chilly patient
- Gastric affection

3. Exclusion criteria: Patients presenting with above clinical feature are taken into consideration & other than these rest are excluded.
4. Experimental group: The test group will be divided into two sub groups:-
 Contact person of one airport should be taken as test group & another will be taken as control group.

Test Group – This group will receive the homoeopathic medicine only.

Control Group – This group of patient will receive only placebo.

5. Prevention: For prevention Arsenic alb. should be given in 1M potency two times daily in empty stomach for three days.
6. Route of administration: Medicine will be administered through oral route.
7. Follow up & Monitoring: The patient should be instructed to report at required interval for proper follow up & assessment.
8. Analysis of the results: The results will be categorized into two main groups like
 - i) Positive response
 - ii) Negative response
9. Statistical Evaluation: After completing the clinical trials the data of the results will be statistically evaluated.

Conclusion

Finally conclusion will be drawn in view of the objectives laid down in the study.

Precautions

If a suspect SARS is admitted to the hospital, infection control personnel should be notified immediately. Infection control measure should include:-

- i. Standard precautions (e.g. Hand hygiene) in addition to Routine standard precaution.
- ii. Health care personnel should wear eye protection for all patient contact.

- iii. Contact precautions (e.g. use of gown and gloves) for contact with the patient or their environment.
- iv. Air borne precaution e.g. Isolation Room with negative pressure relative to the surrounding area and use of an N-95 filtering disposable respirator for persons entering the room.
- v. If air borne precautions can't be fully implicated, patient should be placed in private room and all persons entering the room should wear N-95 respirators.
- vi. If N-95 respirators are not available, than surgical mask should be worn.
- vii. For home or residential setting, placing a surgical mask on suspect SARS patient during contact with others at home is recommended. Household members in contact with the patient should be reminded of the need for careful hand hygiene including hand washing with soap and water. If hands are not visibly soiled alcohol-based hand rubs may used as an alternative to hand washing. be