

Severe Acute Respiratory Syndrome (SARS): The traveller's dilemma.

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Introduction

The outbreak of Severe Acute Respiratory Syndrome (SARS) also known as "atypical pneumonia" in Guangdong Province, China in November 2002 and the subsequent spread to Hong Kong by mid-February 2003 highlights the importance of emerging diseases in clinical practice. (*SA Fam Pract 2003;45(3):6-7*)

As at 1 April 2003, 685 admissions with pneumonia symptoms were reported in Hong Kong.¹ Cases of SARS have also been reported in a number of countries including Taiwan, Thailand, Singapore, United Kingdom, Slovenia, Canada and United States of America resulting in a death toll of 49 cases and case fatality proportion of 4% (**Table I**).² The latter has subsequently increased to 63 deaths by 1 April 2003. Considering the ease of air travel between continents, family practitioners need to be aware of the clinical presentation of this syndrome.

CLINICAL FEATURES

Typically, the syndrome presents with high fever (>38°C), a non-productive cough, shortness of breath and difficulty in breathing.³ In addition to the fever and respiratory symptoms, it may be associated with headache, muscular stiffness, loss of appetite, malaise, confusion, rash, and diarrhoea. A history of close contact with a person diagnosed with SARS or a recent history of travel to an area reporting cases of SARS should alert the family practitioner to the possibility of this syndrome in any patient who presents with flu-like symptoms.

The incubation period of SARS is typically 2 to 7 days but may be as long as 10 days. The causative agent has been identified to be a *corona virus*, which is transmitted by droplets and direct contact with secretions of suspected cases.

Table I: Cumulative Number of Reported Cases (SARS) worldwide (From: 1 Feb 2003 To: 26 Mar 2003, 13:00 GMT+1)			
Country	Cumulative number of case(s)	Number of deaths	Local transmission*
Canada	19	3	Yes
China, Guangdong Province+	792	31	Yes
China, Hong Kong Special Administrative Region	316	10**	Yes
China, Taiwan	6	0	Yes
France	1	0	None
Germany	4	0	None
Italy	3	0	None
Republic of Ireland	2	0	None
Singapore	74	1	Yes
Switzerland	2	0	To be determined
Thailand	3	0	None
United Kingdom	3	0	None
United States	40 §	0	To be determined
Vietnam	58	4	Yes
Total	1323	49	

Notes:

Cumulative number of cases includes number of deaths.

As SARS is a diagnosis of exclusion, the status of a reported case may change over time. This means that previously reported cases may be discarded after further investigation and follow-up.

* National public health authorities report to WHO on the areas in which local chain(s) of transmission is/are occurring. These areas are provided on the list of *Affected Areas*.

+ This is an updated report of cases from 16 November 2002 to 28 February 2003 in Guangdong Province. The number of cases was compiled from investigations as well as hospital reports and may include suspect as well as probable cases of SARS.

§ Due to differences in the case definitions being used at a national level, probable cases are reported by all countries except the United States of America, which is reporting suspect cases under investigation.

** One death attributed to Hong Kong Special Administrative Region of China occurred in a case medically transferred from Viet Nam.

SPECIAL INVESTIGATIONS

Chest x-ray findings in a substantial proportion of infected patients reveal focal infiltrates, which rapidly become generalised. At the peak of the respiratory illness, about 50% of patients have leukopenia and thrombocytopenia.⁴ Liver enzymes especially transaminases may be 2-6 times the upper limits of normal. Tragically, the communicable disease specialist who diagnosed the first suspected case of SARS died recently from complications of SARS. This highlights the importance of infection control measures in clinical practice and homes of suspected cases.

PRACTICE AND PATIENT PROTECTION

When a suspected case of SARS presents at the doctor's consulting rooms, it is important for the doctor, including the practice nurse to use disposable gloves and wear surgical masks. Ordinary surgical facemasks are effective in preventing the spread of droplet infection and the N95 facemask is the most effective model. For extra protection, goggles and gowns may be worn to prevent direct contact with body fluids while examining the patient. After clinical examination, the hands should be washed thoroughly with soap and warm water. For the patient, he or she should be advised to limit interactions outside the home including staying away from work, school or public places until ten days after the resolution of fever and respiratory symptoms. In addition, the patient needs to wear a surgical mask when in contact with uninfected persons to prevent transmission of infectious droplets. In addition, family members and friends should avoid contact with the patient's body fluids and if this occurs to wash their hands properly. All soiled items should be properly discarded.

CLINICAL MANAGEMENT

The management of suspected SARS patients is symptomatic and empirical. The causative virus is not yet fully understood, hence no vaccine is available and the influenza vaccine cannot prevent it. Treatment regimens have included antibiotics used for known bacterial agents of atypical pneumonia, steroids and antiviral agents such as ribavirin or oseltamivir. *Presently the most efficacious treatment regimen, if any, is unknown.*

ADVICE TO TRAVELLING PATIENTS

What should we be telling our patients who wish to travel to countries reporting cases of SARS? A good advice would be to postpone such trips, if they are not crucial. On the other hand, if they have to go the maintenance of good personal hygiene by covering the nose and mouth when sneezing or coughing, washing of hands when soiled by respiratory secretion e.g. after sneezing are paramount. Towels should not be shared and good ventilation must be maintained. It is advisable for the traveller to wear a surgical mask in the plane and public places during the period of stay and to consult a family practitioner if respiratory symptoms develop. SARS is a highly infectious syndrome.

CONCLUSION

It is imperative that the family practitioner must be alert to its occurrence and cautiously review all patients with flu-like symptoms as we approach the winter season in South Africa. □

References:

1. Department of Health, Hong Kong. Latest figures on atypical pneumonia (as at 1 pm, 1 April 2003). Available at <http://www.info.gov.hk/dh/diseases/ap/eng/infected.htm>
2. World Health Organization. Cumulative number of reported cases (SARS). Available at http://www.who.int.csr/sarscountry/2003_03_26/en
3. Centre for Disease Control. Preliminary Clinical Description of SARS. Available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5212a5.htm>
4. Centre for Disease Control. Outbreak of severe acute respiratory syndrome - worldwide 2003. MMWR 2003; 52: 226-228.





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The congress content is divided into two tracks to cater for the needs of medical practitioners and social scientists such as psychologists and social workers.

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