

HEALTH

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TCM

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Sars scars

Sars (severe acute respiratory syndrome) infected 1,755 people in Hong Kong in 2003, killing 299. But its impact didn't end there: the severe inflammation caused by the virus resulted in fibrosis or scarring of the lung tissues of some patients, and 158 patients have been diagnosed with a serious bone degeneration disease called avascular necrosis, a rare condition linked to high steroid dosage.

Hong Kong had a higher Sars mortality rate (17 per cent) than the mainland (6.5 per cent), where integrated Chinese and conventional medication was used to treat patients between November 2002 and August 2003, as reported by the World Health Organisation.

After the epidemic, the Hospital Authority launched a pilot programme to study the role of Chinese medicine in the convalescence of Sars patients.

The amount and degree of fibrosis from inflammation caused by Sars plays a major factor in whether a patient can resume a fully functioning life. Fibrosis, if not treated properly, can become permanent and result in decreased lung



function. A victim can suffer from shortness of breath and a reduced capacity for work or exercise.

In the pilot recuperation programme, several traditional Chinese formulae were used, but the focus was on *Cordyceps sinensis* (above), a fungal parasite on a moth caterpillar.

Ancient Chinese medical texts documented its use as a tonic for extreme weakness resulting from long, drawn-out illnesses and, in particular, severe respiratory diseases. According to traditional Chinese medicine principles, the herb acts on the lung and kidney meridians.

The study was carried out in Kwong Wah Hospital between June and November 2003 by a team of western and Chinese doctors. Hospital workers who contracted Sars and suffered lung damage could volunteer for one of four treatments to help in their recovery.

Each treatment lasted for three months. One group was treated with conventional medication (steroids) only, another took Chinese medicine without *Cordyceps*, the third group took Chinese medicine with *Cordyceps*, and the fourth took *Cordyceps* only.

The treatment's effect on the progress (or retrogression) of the fibrosis was monitored by two modern medical diagnostic methods before and after the three-month treatment period.

The first was by direct observation using X-ray High Resolution Computerised Tomography, which produces high-resolution images of fine structures inside the lungs.

The second monitored the level of an immuno-factor called "Interleukin-2 receptor" (sIL-2R) in the blood. A decrease in sIL-2R after treatment indicates a reduction in inflammation.

The preliminary data found that groups taking *Cordyceps* alone or with Chinese medicine had both a reduction in the area of lung septal thickening and fibrosis (as measured per lung lobe) as well as a reduction in inflammation. Those who took Chinese medicine alone showed a lower immunoassay (inflammation) level, but no significant reduction of fibrosis.

This research showed that in the convalescent stage, *Cordyceps* seemed to reduce the degree of fibrosis of the lung tissue, and it suppressed inflammation when used fewer than 120 days from the onset of Sars.

Rose Tse and Angela Collingwood are editors for Shen-nong, a subsidiary of Integrated Chinese Medicine. Before taking any medicine, consult your TCM or general practitioner