Making all the Right Moves

Dr Rohith Stanislaus

Cough, aches, fever, malaise - we are all familiar with the list of COVID-19 symptoms. Many of these symptoms are common across the wide spectrum of viral respiratory infections, of which there are many.

And while these symptoms are relatively easy to manage with supportive treatment, in the case of COVID, they could progress to more severe conditions, making the management of COVID-19 patients a more challenging undertaking.

Dr Rohith Stanislaus recalls that the initial days and weeks of patient management following the first cases in Malaysia were very challenging.

We were working in a blind spot as there was not much information to go on, and there were no precedents; more importantly, we did not know the extent of what we were dealing with.

The novel coronavirus really put us in a novel situation.

All hospitals have infectious diseases protocols, and this is what we fell back on as we formulated our internal procedures, using the MOH guidelines as a base. So, we viewed every patient as COVID positive and everyone was tested.

When patients came in, we would stabilise them, trace their history, conduct a PCR test and then move them to the designated wards. COVID negative patients will proceed to our normal wards, and COVID positive patients sent to either HDU Cardiology or a COVID specific ward, depending on the level of care they required. If they are critical patients or need intubation, they are likely to be placed in negative pressure rooms.

The MOH guidelines to categorise COVID-19 patients are described as:

Asymptomatic - Category I
Symptomatic without pneumonia - Category 2
Pneumonia - Category 3
Requiring Oxygen - Category 4
Requiring ventilation and intubation - Category 5

We were all continuously learning new things and had multiple tasks - it was a multi-disciplinary approach. Every doctor in IJN learned how to manage these patients, consulting with the ID consultants at Hospital Sungai Buloh for any complex cases. Every step was outlined, from the approach and types of medication, to when to perform CT scans to help identify complications of the disease process.

Dato' Dr. Suneta Sulaiman

Meanwhile, Dato' Dr. Suneta Sulaiman explains that one of the key management protocols was observing the patients to quickly identify deterioration in the clinical condition.

If patient start having breathing difficulties, we will support lung function through non-invasive methods, avoiding intubation as much as possible. We monitor overall lung function, blood gas, oxygen saturation, and breathing function, among others, to quickly pick up any deterioration, and these would help us to intervene earlier.

Patients who need intubation would be given analgesics and muscle relaxants and kept sedated during the entire intubation period. We usually want to wean them off intubation as soon as possible because there can be complications such as ventilator-associated pneumonia. Lung injury and various other issues can also arise as we are literally manipulating the pressure in the lung, and a diseased one at that.

If the ARDS is severe and the lungs fail, the last resort would be ECMO. This is a form of the heart-lung machine that channels the patient's blood out, oxygenating it and pumping it back into the body, basically taking over the entire function of the lungs. Unfortunately, the mortality rates for those intubated, especially those on ECMO, are often higher than 80%. Bear in mind, however, that these patients were already very ill to start with.

More often than not, those who do not make it have multiple comorbidities, meagre ejection fraction, and don't respond well to treatment. For example, those with kidney failure with elements of heart disease usually present as Category 4 COVID patients and can deteriorate very quickly.

Generally, ECMO is not easily available in most hospitals, and the procedure demands a lot from both the staff and the patient. Also, it is not suitable for all patients. There are contraindications, inclusion and exclusion criteria to consider, and we also must evaluate the benefit to the patient as well as the prognosis. It is a difficult situation, and sometimes we just have to do whatever we can and hope for the best.

Dr Rohith and Dr Suneta concur that with the swift and informed decisions and the decisive and pre-emptive steps the IJN task force had put in place, the hospital has managed to weather the storm of the past 20 months.

"The initial fear of the unknown has now transformed into caution and care, fuelled by more information and the experience that we have gathered. The upheavals and disturbances have somewhat settled, and we are in a much-improved position. We just hope that we will not need to bring out the guns once again," says Dr Suneta.

And in Dr Rohith's words, "In as much as COVID-19 can be a multi-symptom viral infection, it also requires a multi-disciplinary approach and management. We move forward in the hope that the knowledge we have gathered will help us to better manage this pandemic.