

Blog, 1.6.2020

Nothing new to add about Covid-19, really! Still the same mistruths and mischief in news and social media though, so briefly I thought I would go through a few of the important ones again.

1. When can you say a patient is over Covid-19 and now well?

It is still difficult to define. Our hospitals have relied on a working diagnosis of 48 hours free of symptoms before discharging patients. But then there is the group who are unwell in the second and third weeks - think Boris Johnson - whose problem is no longer exactly the virus but the hyperimmune response caused by the damaged lung cells, the release of the so-called "cytokine storm". And we are now finding a few of these patients are suffering weeks, and even months after becoming infected akin to Chronic Fatigue Syndrome, Tapanui Flu and Chronic Pain Syndromes.

Also viral shedding.....this is why swabs register 'weak positive' and can be positive in some people it seems for some weeks. This is a consequence of how we scientifically diagnose this actual virus on the nasopharyngeal swabs.

The swab doesn't look for the whole virus. It actually melts the virus down in a solution of chemicals especially designed to break up the RNA into pieces, looks for specific pieces, which are then multiplied up by the millions until there are enough that, we can find them in a specifically designed test.

The trouble is the swabs also pick up old, deactivated and useless broken down viruses, and sometimes there are the pieces there we are looking for, and these get multiplied up too.

These 'weak positives' do confirm the person did have Covid-19, but it is very, very unlikely that any of those broken down viruses could make anybody else sick.

How long does a person shed for after being sick?

We don't know. It is usually a few days to a few weeks, going on what happens in the corona viruses that cause the common cold, but detectable pieces of RNA have been found more than 6 weeks in a few patients who were previously sick.

It is now thought that it was these 'false positive' swabs, are what caused the hysteria in February and March about being able to catch Covid-19 twice.

No. Catching it twice within the first 4-6 months does not happen.

What about after 6 months? People are now worrying about a second wave of infection like in the 1918 Spanish Influenza [which remember started in the USA], which was worse the second time around. Most deaths were in 1920.

Answer is we don't know yet. Will infection lead to lasting immunity or not?

Antibody testing which is now getting more accurate, faster and cheaper, will help us answer this question.

It will be antibody testing in Germany and Sweden in particular, we will be watching to see if immunity wears off after about 9 months [like some infections] or whether Covid-19 infection leads to the longer lasting sort of immunity. Knowing this is critical if a long acting vaccine is to be developed [it does look promising though].

2 All we need is a vaccine.....

No. No vaccine is 100%. Vaccines take time to develop, and then 12-18 months to manufacture enough to be available to the likes of you and me.

We seem to be winning already at one of the points I said many blogs ago.

We needed to win: that is treating that hyperimmune response in 2<sup>nd</sup> and 3<sup>rd</sup> weeks, the one that kills especially younger people. And as I predicted way back in March, we already have the drugs. They are IV, and they are expensive. But we have them and can use them. Our Intensive Care Specialists- bless them all as they put their lives on the line and still found time to share their insights into treatment- are now much better at treating these very sick patients. Ventilators are not as necessary as we thought either. Lots of oxygen is.

We have improved our contact tracing at both a personal and molecular level enormously. We aren't there yet on rapid early diagnosis [preferably by the first day of symptoms, or the day before in known contacts when people are at their most infectious] or initiation of antiviral treatment early enough- but are making strides towards these goals. We need them all if we are to beat this virus.

In the meantime we are locking down in this bubble now big enough to envelope our little country. And we are not just waiting for the rest of the world to solve the problem of Covid-19: our scientists, with added financial support from our Government are working hard to find the solutions for all these needed points above.

At the surgery we are getting back to normal. Almost normal. We don't want to see patients with respiratory illnesses actually in the waiting room yet. We will see you in the carpark though, do a covid-19 swab, and it won't cost you a cent! The results come back fast now, usually within 24 hours for a negative swab- but I'm sure much faster if it is positive.

Others sharing your home don't have to stay at home until you get your results, but they will have to be accurate with their records of where they go, when and who they have contact with just in case the swab is positive. That's got to be a very low chance now, but unfortunately we still have a tiny chance and we can't afford to have it get away on us again.

We are still doing telephone consults and our iPads have finally arrived and we will be setting up video consults this week. We are going to trial using the website doxy.me as patients don't need to download it or get an app.

When a patient rings in and asks for an appointment using video, they will be given an appointment time, and sent a link via email. You then click on the link, which will then take you into the doctors virtual waiting room. When the doctor clicks on your name in the waiting room the video link is activated. (please make sure we have your updated email address).

The iPads also can use Facetime if a patient has an iPhone too.

For our experienced IT users, please be patient with us: we try to keep up with IT advances, and the two older ones of us [Dr Cathy is exempted from this plea] do amazingly well. As children who grew up with party line telephones, radio for music and no TV, and certainly no cellphones, computers and internet! [My daughter has

always found this hard to imagine -

My first experience of a computer in 1972 as a university student illustrates this. It took a whole building and there was one for the whole university. I was allocated two slots to use it to crunch numbers for a study I was doing in Geography, both at 3am. Numbers were punched into trays of cards and fed into this noisy machine which eventually chewed out more cards dotted with tiny rectangular holes...]

First fine day this week- pics of staff, individual updated pics and new bios for our website.

Ka kite ano from us all at Tiakina Te Ora.