From: Dr Lee Fong lksfong@gmail.com
Subject: [HunterGP] COVID-19 & Kawasaki-like disease/shock syndrome

Date: 14 May 2020 at 11:09 pm

To: HunterGP huntergp@googlegroups.com

## Notes on COVID-19 & Kawasaki-like disease/shock syndrome (Paediatric multisystem inflammatory syndrome temporally associated with COVID-19)

## It's very rare:

- Kawasaki disease usually affects preschool-aged children and occurs in roughly one in 10,000 children there are about 300 cases of it a year in Australia
- o Kawasaki-like disease ?linked to COVID-19 has been identified in more than 100 children in New York State, and linked to three deaths there. It has been recorded in 14 other US states and there have been more than 50 cases in the UK and in European countries including France, Switzerland and Spain.
- o countries reporting cases have had thousands or hundreds of thousands of COVID-19 cases for example, US has had a million cases of COVID-19 so, even if the risk of children getting this new syndrome was one in 10,000, 100 cases could occur due to the large numbers of infections
- o given the low number of COVID-19 cases in children in Australia and the rarity of this Kawasaki-like illness, the likelihood of a child getting Kawasaki-like syndrome related to COVID-19 is very, very small in Australia.
- o not everyone with this presentation is testing positive to COVID-19 (?eliminated virus prior to Kawasaki-like disease signs/symptoms developing)
- Comparison between Kawasaki disease & COVID-19 Kawasaki-like disease:
  - Kawasaki disease
    - 85% of cases occur under 5 years of age, peak age 18-24 months
    - Fever persisting for at least 5 days, PLUS 4 of the 5 criteria:
      - Conjunctivitis bilateral, dry, painless
      - Lymphadenopathy cervical, most commonly unilateral, tender, at least one node >1.5cm
      - Rash polymorphous, without vesicles/bullae/crusts; variable presentations (urticarial, morbilliform, maculopap, ~scarlet fever)
      - Lips & oral mucosa intense hyperaemia of lips/redness/cracking, erythema of oropharynx, strawberry tonque
      - Extremities hyperaemia/painful oedema hands/feet -> desquamation in convalescent stage; perineal desquamation almost noted
    - Can progress to Kawasaki disease shock syndrome, with hypotension and peripheral hypoperfusion
  - o COVID-19 Kawasaki-like disease
    - Typical age range is older average of 7.5 years of age (vs 3.0) in one series includes teenagers
    - In one series, 7 of 8 patients had a BMI well above the 75<sup>th</sup> centile
    - Incomplete/atypical Kawasaki-like disease is more common (i.e. fever is present, but less than 4 of the 5 other criteria for Kawasaki disease present)
    - Significant gastrointestinal symptoms are frequently prominent (abdominal pain, diarrhoea)
    - Meningeal and respiratory signs may also be present
    - Disease course is more severe, including progression to a Kawasaki disease-like shock syndrome, refractory to measures such as volume resuscitation and intravenous immunoglobulin
- More information on Kawasaki disease presentation/management https://www.rch.org.au/clinicalguide/guideline\_index/Kawasaki\_disease/
- Specific guidance on COVID-19 Kawasaki-like disease https://www.rcpch.ac.uk/sites/default/files/2020-05/COVID-19-Paediatric-multisystem-%20inflammatory%20syndrome-20200501.pdf



## - Other references:

- o https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(20)31094-1.pdf
- o https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31103-X/fulltext
- https://www.uptodate.com/contents/coronavirus-disease-2019-covid-19-considerations-in-children?
   search=covid19%20kawasaki&source=search\_result&selectedTitle=2~150&usage\_type=default&display\_ra\_nk=2#H647091148
- <a href="https://www.smh.com.au/national/how-does-covid-19-affect-children-and-what-is-kawasaki-disease-20200514-p54swe.html">https://www.smh.com.au/national/how-does-covid-19-affect-children-and-what-is-kawasaki-disease-20200514-p54swe.html</a>

--

You received this message because you are subscribed to the Google Groups "HunterGP" group.

To unsubscribe from this group and stop receiving emails from it, send an email to <a href="https://groups.google.com/d/msgid/huntergp/3ff8a0b3-8177-423d-b4df-db75ad391159%40googlegroups.com">https://groups.google.com/d/msgid/huntergp/3ff8a0b3-8177-423d-b4df-db75ad391159%40googlegroups.com</a>.