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Editorial
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Kawasaki Disease During COVID-19 Pandemic in Korea – Data Were Added but Are Needed More

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Kawasaki disease (KD), also known as mucocutaneous lymph node syndrome, is believed to be related to viral illness, especially viral respiratory tract infection.[1] Most pediatricians in Korea have known that the majority of KD cases usually occur in clusters, especially in winter and early spring. During the COVID-19 (coronavirus disease 2019) pandemic in Korea, however, pediatricians saw a magnificent decrease in the incidence of respiratory viral infections and several infection-related diseases.[2,3] In addition, the observation, i.e., the decrease of pediatric respiratory infections, was supported in the nationwide infectious disease surveillance.[4]

Kim et al.[5] reported the real situation of KD in Korea during the pandemic – specifically saying, during the time of mandatory social distancing. The authors collected the data from five university-affiliated hospitals located in the Seoul Metropolitan Area, where the effect of the policy could easily be seen. In the report, the decrease in the total number of KD but no changes in clinical outcomes were seen. In addition, even though the proportion of KD admissions of infants younger than 1 year of age increased, the proportion of refractory KD and the complicated cases did not increase significantly during the social distancing period.

Now in Korea, we are experiencing a COVID-19 "omicron variant" surge and subsequent inescapable cases of multisystem inflammatory syndrome in children (MIS-C), which shows somewhat similar clinical features and is believed to share the same pathophysiology in part to those of KD. When the MIS-Cs appeared first, scientists hoped they could identify some clues to elucidate the cause of KD as those MIS-Cs were related to COVID-19. However, the exact mechanism of how these vasculitis syndromes develop is still being investigated.

As the COVID-19 surge subsides, we anticipate a period that the social distancing should not be mandatory anymore, and most pediatric infectious diseases would appear again. If we call a pathogen causing or related to KD X, the chance for children to be exposed to pathogen X is reduced during the social distancing period so that the pediatric population accumulates who would experience the pathogen for the first time in life. In addition, their age would increase so that their innate and adaptive immune responses could change when they were infected by the pathogen. How will the epidemiology, the clinical presentation, and the outcome change or not after the pandemic? Data have been added during the pandemic but are needed more after it.

REFERENCES

1. McCrindle BW, Rowley AH, Newburger JW, Burns JC, Bolger AF, Gewitz M, et al. Diagnosis, treatment, and long-term management of Kawasaki disease: a scientific statement for health professionals from the American Heart Association. *Circulation* 2017;135(17):e927-99.
   PUBMED | CROSSREF
2. Choe YJ, Lee Y, Shim JO. Impact of social distancing on intussusception incidence in children. *J Korean Med Sci* 2022;37(2):e16.
   PUBMED | CROSSREF
3. Yoo IH, Kang HM, Jeong DC. Changes in the incidence of intussusception and infectious diseases after the COVID-19 pandemic in Korea. *J Korean Med Sci* 2022;37(8):e60.
   PUBMED | CROSSREF
4. Korea Disease Control and Prevention Agency. Infectious Diseases Surveillance Yearbook, 2020. https://www.kdca.go.kr/npt/biz/npp/portal/nppPblctDtaView.do?pblctDtaSeAt=1&pblctDtaSn=2452. Updated 2021. Accessed May 16, 2022.
5. Kim BJ, Choi A, Kim HS, Oh JH, Lee JY, Kim S, et al. Changes in the clinical characteristics of Kawasaki disease after coronavirus disease (COVID-19) pandemic: a database analysis. *J Korean Med Sci* 2022;37(20):e141.
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