

Correspondence

To the Editors

COVID-19, paediatric dental caries and severity of disease: a complex interrelationship

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Dear Editors,

An important public health problem among the paediatric population worldwide is dental caries. Poor dental hygiene is the main cause of dental caries¹. However, other factors may also affect the dental health of children. During the COVID-19 pandemic, the management of dental caries among children became more difficult than usual². The interrelationship between COVID-19 and dental caries in children is an interesting issue. Firstly, although COVID-19 can have many atypical clinical presentations, including oral presentation, dental problems are hardly ever mentioned³.

There is no evidence that SARS CoV2 causes problems to sort out dental issues. Nevertheless, COVID-19 can cause difficulty in dental care assessment and there was a report that the fear of SARS-CoV-2 was associated with poor oral health-related quality of life during the COVID-19 pandemic⁴. In China, during the lockdown, a high percentage of children reported the problem of dental caries⁵. There is no doubt that there is an indirect effect of COVID-19 on dental caries. There are very few reports for a direct relationship between dental caries and COVID-19. Dziesdzic A, *et al* recently reported that tooth loss in COVID-19 might be a consequence of soft tissue inflammation due to COVID-19⁶. Additionally, the relationship between COVID-19 and the dental damage stage determined by radiological examination was recently proposed⁶. The severity and prognosis of the disease was found to be related to dental problems⁶. For a possible explanation, there is a recent report showing that periodontopathic bacteria in a COVID-19 patient with underlying periodontitis and caries might have led to aspiration and lung problems⁷. This may be superimposed on the lung problem due to SARS CoV-2 and result in a more severe illness.

Finally, suboptimal vitamin D level in children is reported to increase the risk of caries⁸. It is possible that there is a concurrent problem between vitamin D deficiency and caries in children. Vitamin D deficiency is also reported to increase the risk of COVID-19⁹. There might be a possible interrelationship between vitamin D deficiency, dental caries and COVID-19.

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