

Among several environmental factors associated with type 1 diabetes (T1D), childhood viral infections are recognised as potential triggers of islet autoimmunity (pre-T1D).

Increased incidence of T1D has been observed widely since the beginning of the COVID-19 pandemic, although studies in Europe and the US have provided conflicting data on whether SARS-CoV-2 infection plays a direct role in islet autoimmunity development.

This study examined whether there is a temporal association between SARS-CoV-2 infection and the development of islet autoimmunity among ENDIA children who have a first-degree relative diagnosed with type 1 diabetes. We found that SARS-CoV-2 infection is unlikely to increase risk of developing islet autoimmunity.

Further work is needed to be certain. If not SARS-CoV-2, what else might have caused the increased the number of T1D diagnoses post-COVID-19 pandemic?

Currently, we are focusing on the potential role of gut-infecting viruses, called enteroviruses, as a candidate trigger of islet autoimmunity. If we can identify what triggers the development of islet autoimmunity, well before the development of type 1 diabetes, we can then put in place early intervention strategies, like vaccination, which can delay or even prevent people from getting the condition altogether.

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