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vaccinated) were facial paralysis events (749 cases were with the Pfizer-BioNTech vaccine and 95 with the Moderna vaccine). Moreover, it is important to note that 0.5% of the 1,265,182 cases reported as adverse drug reactions with other virus vaccines, and 0.7% of the 314,980 cases reported with flu vaccines, were facial paralysis events<sup>6,7</sup>. Pharmaco-epidemiological studies have been unable to demonstrate a greater risk of facial paralysis following administration of these vaccines, and the data after mRNA COVID-19 vaccine administration seems to be consistent with this.

We are not aware of any other reported cases of Ramsay-Hunt syndrome following COVID-19 vaccination or any other virus vaccination in the recent literature. This is probably because herpes zoster oticus accounts for less than 1% of all cases of herpes zoster and 12% of peripheral facial paralysis cases<sup>8</sup>, whose possible associations with vaccines are already rare. Nevertheless, it should not be forgotten that herpes zoster oticus can affect both immunocompetent as well as immunocompromised patients, even though it is much more likely in the latter group and in the elderly, as was the case with our patient. Ultimately, vaccinations with live or attenuated viruses entail immunomodulation that includes suppression of cell-mediated immunity.

To conclude this letter, we would like to emphasise the importance of vaccination to put an end to the pandemic. The possible onset of these conditions is rare and the risk is very low. However, they should still be taken into account and properly reported in order to optimise the registration of this large-scale trial that is global vaccination.

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## Ramsay Hunt syndrome and mRNA SARS-COV-2 vaccination



### Síndrome de Ramsay Hunt y vacunación de ARNm contra el SARS-COV-2

Dear Editor:

We would like to share ideas on “Ramsay Hunt syndrome following mRNA SARS-COV-2 vaccine.”<sup>1</sup> Rodríguez-Martín et al. noted that “The onset of ocular symptoms starting within one week following vaccination suggests an inflammatory or autoimmune ... Ophthalmologists should consider the option of autoimmune ... as uveitis, following COVID-19 vaccination.”<sup>1</sup> In general, adverse reaction to new COVID-19 is sporadically reported. The facial palsy is also possible. For Ramsay Hunt syndrome, there are many possible causes. In the present case, BNT162b2 vaccine is used. For mRNA COVID-19 vaccine, the important consideration is on induction of autoimmunity. Association between autoimmunity and Ramsay Hunt syndrome is reported.<sup>2</sup> Nevertheless, if the autoimmunity is the cause of post COVID-19 vaccination Ramsay Hunt syndrome, an abnormal autoimmunity should be detected. The other possible cause of facial palsy after COVID-19 vaccination is the vaccine induced hyperviscosity. After receiving COVID-19 vaccine, a recipient might develop excessive immune response and result in excessive blood viscosity.<sup>3</sup> Hyperviscosity is reported as cause of facial palsy in the literature and might be another cause of reported syndrome in the case report.<sup>4</sup>

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