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## Subacute thyroiditis after COVID-19 vaccination



### Tiroiditis subaguda tras la vacunación con COVID-19

Dear Editor:

We would like to share ideas on the publication “Subacute thyroiditis after anti-SARS-CoV-2 (Ad5-nCoV) vaccine.<sup>1</sup>” Rebollar reported a case and mentioned for possible clinical association between thyroid problem and COVID-19 vaccination.<sup>1</sup> Thyroid problem might be followed vaccination and the pathogenesis is still inconclusive. Regarding subacute thyroiditis, there are sporadic case reports in COVID-19 vaccine recipients.<sup>2,3</sup> The observed thyroid abnormality might or might not be associated with vaccination. After vaccination, the abnormal thyroid function might occur and it is not related to any immunological abnormality.<sup>4</sup> Hyperviscosity might occur after vaccination<sup>4</sup> and it can result in an aberrantly thyroid function.<sup>5</sup>

### Authors contribution

SY (50%): (1a) Substantial contributions to study conception and design. (1b) Substantial contributions to acquisition of data. (1c) Substantial contributions to analysis and interpretation of data. (2) Drafting the article or revising it critically for important intellectual content. (3) Final approval of the version of the article to be published.

VW (50%): (1a) Substantial contributions to study conception and design. (1b) Substantial contributions to acquisition of data. (1c) Substantial contributions to analysis and interpretation of data. (2) Drafting the article or revising it critically for important intellectual content. (3) Final approval of the version of the article to be published.

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### Conflict of interest

The authors ask for waiving for any charge relating to this correspondence.

### Bibliografía

- Rebollar AF. Subacute thyroiditis after anti-SARS-CoV-2 (Ad5-nCoV) vaccine. *Enferm Infect Microbiol Clin.* 2021;(November); <http://dx.doi.org/10.1016/j.eimc.2021.10.015> [online ahead of print].
- Sözen M, Topaloğlu Ö, Çetinarslan B, Selek A, Cantürk Z, Gezer E, et al. COVID-19 mRNA vaccine may trigger subacute thyroiditis. *Hum Vaccin Immunother.* 2021;10(December):1–6.
- Jeeyavudeen MS, Patrick AW, Gibb FW, Dover AR. COVID-19 vaccine-associated subacute thyroiditis: an unusual suspect for de Quervain's thyroiditis. *BMJ Case Rep.* 2021;14, e246425.
- Mungmumpuntipantip R, Viroj Wiwanitkit V. Abnormal thyroid function following COVID-19 vaccination. *Indian J Endocrinol Metab.* 2021;25: 169.
- Joob B, Wiwanitkit V. Expected viscosity after COVID-19 vaccination, hyperviscosity and previous COVID-19. *Clin Appl Thromb Hemost.* 2021;27, <http://dx.doi.org/10.1177/10760296211020833>.

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## Respuesta a "Tiroiditis subaguda tras la vacunación con COVID-19"



### Reply to "Subacute thyroiditis after COVID-19 vaccination"

Sr. Editor:

La carta de Yasri y Wiwanitkit<sup>1</sup> sobre mi reporte de caso<sup>2</sup> especula sobre la asociación de vacunación anti COVID-19, hiperviscosidad sanguínea y disfunción tiroidea. No existe una relación fisiopatológica descrita entre hiperviscosidad y «función tiroidea aberrante». Las mediciones hormonales tiroideas espurias ocasionadas por la hiperviscosidad sanguínea y la disfunción tiroidea no deben ser confundidas.

La hiperviscosidad por componentes celulares (proteínas), que pueden ser monoclonales o policlonales, son causa conocida de posible interferencia en los inmunoanálisis usados en tiroides<sup>3</sup>; entre estas entidades poco comunes se encuentran: macroglobu-