

COVID-19 vaccines and neuromuscular diseases

Dr. E. Goñalons, February 23rd, 2021

The vaccination campaign is all over the media and, expecting a call to vaccination at any moment now, many of us wonder if we should take any precaution with or have a special consideration for collagen VI CMD patients.

On February 23rd, 2021, **Dr. Montse Olivé**, from the Sant Pau University Hospital and member of the Asem Catalonia* Experts Committee, and **Dr. Daniel Natera**, a neuropediatrician from the Sant Joan de Déu University Hospital in Barcelona, delivered a webinar on COVID-19 vaccines and neuromuscular diseases in general, but which, logically, can be directly extrapolated to our patients.

Regarding the impact of COVID in neuromuscular patients, Dr. Natera mentioned the results of a small study recently carried out at the Sant Joan de Déu University Hospital, which has been published in the Journal of Neurology, an international reference medical publication. The study assessed the impact of COVID-19 in 29 patients (mean age, 8 years) affected by neuromuscular diseases (specifically, Duchenne and Spinal Muscular Atrophy), and showing various degrees of motor impairment and/or needed respiratory support. The results showed that most of the cases were asymptomatic or displayed mild symptoms, and very few of them required hospitalization. The study concluded that neuromuscular patients showed no more complications than those observed in healthy children, and that young age was probably a more important factor in the protection of patients against COVID, than the potential higher risk of respiratory complications derived from their condition.

Regarding the vaccine, both physicians showed confidence in the three products currently being administered in Spain (from Pfizer, Moderna and Astra-Zeneca) on the basis of the following considerations:

- a) Clinical studies have been carried out to test the vaccines on over 15,000 volunteers each.
- b) All mandatory protocols have been followed.
- c) All of them have been approved by the competent health authorities in each region.
- d) The great research job conducted, taking advantage of the existing knowledge on coronavirus and avian flu.

Dr. Natera also pointed out that, ever since the vaccination campaigns have started in various countries of the world, from the United States to Europe, there have been no cases suggesting that there might be contraindications in patients with neuromuscular diseases.

Therefore, he showed confidence about the safety and efficacy of the vaccines, although he agreed with Dr. Olivé in recommending "caution" in the event doubts arise about whether these vaccines may eventually interfere with patients' access to clinical trials or with the efficacy of adenovirus-based treatments, which are being developed for certain neuromuscular diseases.

As for patients with known allergies, although there do not seem to be any contraindications, both clinicians advised that the vaccine be administered in a medical center, as a precaution.

Finally, and without prejudice to the value of their opinions, given that the scope of the talk included all types of neuromuscular diseases, the recommendation of the speakers was to always address each patient's reference physician, so that they can take into consideration the particular circumstances of each one and their particular pathology.

You can find an article on this event, on which this review is based, on the Asem Catalunya website by clicking on the following link (Catalan only) <http://asemcatalunya.com/missatge-de-confianca-pero-tambe-prudencia-davant-les-vacunes-contra-la-covid-19-per-neuromusculars/> *Asem Catalonia: Catalan Association of Neuromuscular Diseases Patients