Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Answer to Cabona et al « Isolated musculocutaneous nerve involvement in COVID-19 related Neuralgic amyotrophy» Joint Bone Spine 2021;88:105238 and to Finsterer and Scorza « SARS-CoV-2 or SARS-CoV-2 vaccination associated Parsonage-Turner syndrome». Joint Bone Spine 2021;88:105239

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We are very satisfied that our article interests readers and generates comments. We will answer them point by point.

We have a few concerns with the correspondence of Cabona et al. The main concern is that the truncal involvement of the musculocutaneous nerve (MCN) is not demonstrated. Indeed, clinically, there is no forearm paresthesia, and no electrodiagnosis study of the lateral antebrachial cutaneous nerve (sensitive branch of the MCN), which is the gold standard to differentiate an MCN truncal lesion from a C6 root lesion. Considering magnetic resonance imaging (MRI) data, the result of the cervical MRI is missing and the very interesting hyper-signals of some fascicles can also be seen after radiculopathy [1]. In our cases, the absence of such hyper-signal is explained by the long delay to obtain a high-quality brachial plexus and spinal accessory nerve (SAN) MRI by a specialized radiologist. Furthermore, the motor deficit is only 4/5 MRC with full recovery in one month when usually deficit is severe (0 to 2/5 MRC) in neuralgic amyotrophy of Parsonage and Turner (NAPT) and full recovery exceptionally occurs before 6 to 12 months [2,3]. Overall, the diagnosis of MCN lesion related to NAPT, in this case report, remains doubtful. We are also very surprised to see that the definition of NAPT used is a copy and paste of our present article but referenced as from Van Alfen's article.

We also have concerns with the Finsterer and Scorza correspondence.

The exact delay between COVID infection and the occurrence of probable NAPT is unknown in both cases. The causes are clearly explained in the paper, and this has been considered as a limitation of our paper. Moreover, the delay of 10 and 6 weeks is normal and quite short for NAPT diagnosis (mean time = 43.8 weeks) for Van Alfen [3], particularly when spinal accessory nerve (SAN) is solely impaired, the delay may be up to 13 years in Seror [4].

No patient had clinical signs of systemic auto-immune disease such as systemic lupus erythematosus or vasculitis, and none had significant titers for antinuclear antibodies, autoantibodies to extractable nuclear antigens, FARR test, anti-neutrophil cytoplasmic antibody. Therefore, these results were not reported in our paper as considered off-topic. The second patient had a well-balanced type 2 diabetes, with a glycosylated hemoglobin of 6.1%.

Regarding the frequency of Guillain-Barre syndrome, which is not the subject of our article, the occurrence of 220 cases out of about 100 million humans infected with COVID by the end of 2020 makes COVID-related Guillain-Barre syndrome a rare condition, even more when compared to the incidence reported by Sejvar [5].

Three or 6 cases of previously published NAPT don't change the significance of our paper, and vaccination cases were not published when our paper was submitted. Moreover, the occurrence after vaccination is another positive argument to consider that COVID may be a trigger for NAPT.

The preservation of sternocleidomastoid muscle is usual in iatrogenic as well as medical SAN palsy as it has been reported [4]. This is easily explained by the impairment of the SAN fascicle devoted to trapezius muscle within the main trunk of SAN or XIth cranial nerve. This pattern is well known for anterior interosseous nerve (AIN) palsy related to NAPT, AIN fascicle is solely impaired within the median nerve trunk in the arm 10 to 15 cm above the separation of the AIN from the median nerve in the upper forearm [6–8] without damage to other fascicles devoted to digital sensation, antebrachial and abductor pollicis brevis muscles.

Naturally, reporting NAPT cases related to COVID cannot wait the 6 months to 3 years which is the usual recovery time for such lesions. Corticosteroid is the only drug treatment recommended for NAPT [9], and both patients received corticosteroid for SARS, but the effect on strength recovery will only be evaluated in many months. They also benefited from pain medication, physical therapy and rehabilitation.

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Disclosure of interest

The authors declare that they have no competing interest.

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