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## A comparison of level of disability (LoD) in patients with blepharospasm between the Covid19 lockdown and the unlock period

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*Introduction*: Blepharospasm (BS) is a focal dystonia presenting involuntary eyelid closure, and it exacerbates with stressful conditions and with light exposure. [1-3].

*Objectives*: We investigated the impact of lockdown (LD) for the Covid 19 pandemic on disability due to BS.

*Materials and Methods*: The level of disability (LoD) was assessed by using four items of the Blepharospasm Disability Index (4iBSDI): reading, whatching TV, walking, everyday activities. Driving and shopping items were not applicable because of the restrictions due to Covid19. A pool of 50 consecutive patients affected by BS, referred to the botulinum toxin (btx) clinic of Cardarelli Hospital of Naples, was investigated on the LoD during the lockdown (LD) and unlock (UL) period. We compared scores from 4iBSDI during the LD period, when patients missed the scheduled injection, and scores obtained during the following UL phase at least three months after the last injection. [4-5].

*Results*: BSDI scores were calculated at the LD and UL time (LDt, ULt). 4iBSDI Mean scores  $\pm$  SD was 3.82 $\pm$ 3.571 at LDt and 5.53 $\pm$ 3.319 at ULt. Mean distribution was not normal therefore values were analyzed by Paired T-student test after logarithmic transformation. Statistical analysis showed a significant difference between 4iBSD mean scores at LDt and ULt (Mean=1.09; CI -1.26, -0.93; p<0.001).

*Discussion*: Our results show that patients with BS could present a lower LoD due to dystonia during the LD period in comparison to the UL phase. During the LD time patients with BS were less exposed to outdoor light and especially to social interaction.

*Conclusions*: People with dystonia present clinical worsening with physical and emotional stress. Our study shows that BS may be extremely affected by emotional factors like social embarrassment. The lack of social interaction experienced during the LD period could have protected BS patients from stressful conditions and alleviate symptoms of dystonia.

## **References:**

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