

**308 Sex-related differences in long COVID-19 syndrome**

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**Aims:** Sex-differences have been demonstrated in the acute phase of COVID-19 infection; females (f) were found to be less prone to develop a severe disease than males (M), but few studies have assessed sex-differences in Long-COVID-19 syndrome.

**Methods and results:** The aim of this prospective/retrospective study was to characterize the long-term consequences of this infection from a sex-perspective. For this purpose, we enrolled 223 patients (89 F and 134 M) who experienced a SARS-CoV-2 infection. In the acute phase of the illness, females reported more frequently than males: weakness, dysgeusia, anosmia, thoracic pain, palpitations, diarrhoea, and myalgia without significant differences in breathlessness, cough, and sleep disturbance. After a mean follow-up time of 5 months after the acute phase, females were significantly more likely than males to report weakness, thoracic pain, palpitations, and sleep disturbance but not myalgia and cough. At the multivariate logistic regression, women were statistically significantly likely to experience persistent symptoms such as dyspnoea, fatigue, chest pain, and palpitations. On the contrary, myalgia, cough and sleep disturbance were not influenced by sex.

**Conclusions:** We demonstrated that females were more symptomatic than males not only in the acute phase but also at follow-up. Sex was found to be an important determinant of Long-COVID syndrome because it is a significant predictor of persistent symptoms in females, such as dyspnoea, fatigue, chest pain, and palpitations. Our results suggest the need for long-term follow-up of these patients from a sex-perspective in order to implement early preventive and personalized therapeutic strategies.