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## REDUCED EXERCISE CAPACITY AMONG CHILDREN WITH LONG COVID

Compared to healthy controls, children suffering from **long COVID (LC)** show impaired functional capacity through decreased **VO<sub>2</sub>** during exercise tests. Additionally, they exhibited subtle signs of heart failure.

The study compared 61 children with LC and 29 healthy controls aged 12 to 15 years. The authors defined LC as one or more unexplained symptoms lasting at least 8 weeks after the initial infection, negatively impacting daily life.

LC is more prevalent in adults than in children, but the authors aimed to use **cardiopulmonary exercise testing (CPET)** to assess the health of cardiovascular and ventilatory systems in patients under 18 years old.

90.2% of LC patients (55 out of 61) had an abnormal test result, compared to 10.3% of healthy controls (3 out of 29). The average VO<sub>2</sub> value was 30.17 ( $\pm 6.85$ ) in LC patients and 34.37 ( $\pm 6.55$ ) in healthy controls.

Furthermore, 48% of LC patients exhibited a phenotypic variant suggestive of **pulmonary hypertension**.

The authors stated that the study opens a new scenario regarding diagnostic possibilities for children suspected of having LC, formulating a new hypothesis about the mechanisms leading to common LC symptoms such as **fatigue** and exercise intolerance.

Pediatric forms of long COVID represent a real condition, not a psychological consequence of the pandemic, and screening methods used among adults, such as biological constants or anamnesis data, should be adapted to the pediatric population to personalize therapy.

*Adapted after Stephanie Soucheray, 17 May 2024*

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