

Pain in the Post-Covid

Atlanta RECOVER Cohort

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Background:
Musculoskeletal (MSK) pain and headache continue to persist as a prevalent symptom in patients with Long COVID (LC).

There remains a lack of comprehensive understanding on its exact prevalence, characteristics, and epidemiology.

The objective of this study was to further explore the post-acute sequelae of LC in the Atlanta RECOVER Cohort compared to the general public.

Methods:
N=734, age ≥ 18 years enrolled in the RECOVER Adult cohort at the Atlanta site.

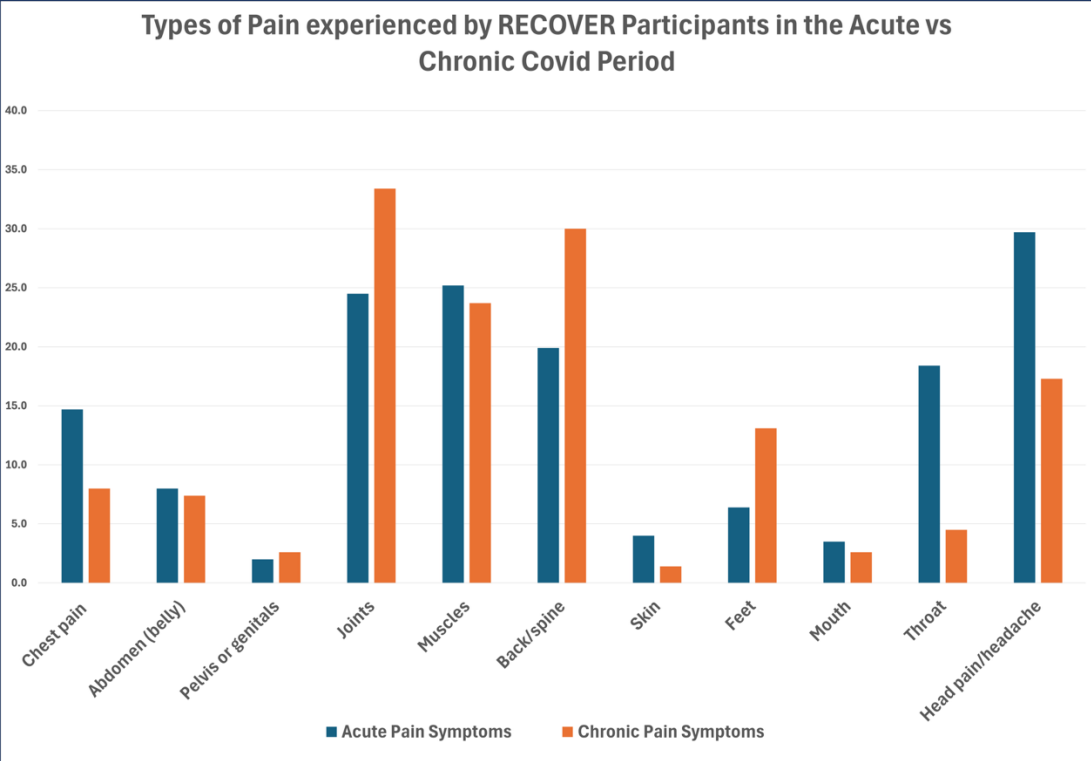
Participating hub sites included the Emory Hope Clinic, Atlanta VA Medical Center, Grady Memorial Hospital, Morehouse School of Medicine, and Kaiser Permanente Georgia.

Counts and percentages were calculated for demographic characteristics and pain-related LC symptom questions, both overall and stratified by hub site.

Results:
In our cohort of LC participants (N=734, age ≥18 years), 30.8% currently reported experiencing pain symptoms. Around the date of first positive test or date of infection (index date), the most prevalent pain symptom was headache at 29.7% followed by muscle pain (25.2%) and joint pain (24.5%).

More than two years after index date joint pain was the most prevalent symptom at 33.4%, with back/spine pain (30%) and muscle pain (23.7%) being the next most common.

15% of participants in our Long-COVID cohort reported experiencing severe pain (> 7 on a 10-point scale), which is higher than the general population estimates of 7–11%



- Discussion:**
- Pain in Long COVID is common but variable — our 28.7% prevalence sits midrange among published studies (0.3–65%)
 - Symptom pattern shifted over time — headaches were most frequent early on, while joint pain became predominant later, suggesting possible autoimmune involvement
 - Diverse representation matters — 68.3% of our cohort identified as non-White, a group often underrepresented in Long COVID research
 - Limitation: Self-reported symptoms may introduce recall bias

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