

category. We aimed to investigate the SARS-CoV-2 infection duration and associated factors to prolonged viral clearance among elderly people comparatively to young people.

Methods:

We conducted a cohort study of asymptomatic and mild forms of COVID-19 patients admitted to the designated national COVID-19 center in Monastir, Tunisia. Patients included in the study were divided into two cohorts: (elderly group: ≥ 60 years old) and (young group: < 60 years old) and were followed up to their RNA viral conversion. Stratified cox regression was performed to determine associated factors with prolonged viral SARS-CoV-2 RNA clearance in elderly subgroups.

Results:

The study included a total of 289 patients with asymptomatic and mild forms of COVID-19. The median term of viral shedding was 20 days (IQR; 16 - 32 days) for the young group, and 21 days (IQR; 17 - 33 days) for the elderly group. The stratified cox regression showed that Age ≥ 60 was an associated factor to prolonged viral shedding in male sex (HR (Hazard Ratio): 1.91; 95% CI: 1.19 - 3.07) and patients with comorbidities (HR:1.68; 95% CI: 1.02 - 2.75) especially diabetics (HR: 2.06; 95% CI: 1.01 - 4.21).

Conclusions:

This study, focused on the factors associated with a prolonged duration of viral RNA clearance in elderly with COVID-19. These Potential factors will help planners to chalk out effective strategies among this vulnerable category.

Key messages:

- Old age is associated with a prolonged duration of viral RNA clearance in specific subgroups.
- Identifying these subgroups is important to know how prioritize preventive strategies in elderly.

Comparison of SARS-CoV-2 RNA clearance between elderly and young patients with COVID-19

Manel Ben Fredj

I Zemni^{1,2,3}, C Bennasrallah^{1,2,3}, W Dhouib^{1,2,3}, D Ben Hassine^{1,2}, M Ben Fredj^{1,2,3}, M Kacem^{1,2,3}, H Abroug^{1,2,3}, R Klii^{1,4}, I Bouanene^{1,2}, A Belguith Sriha^{1,2,3}

¹Faculty of Medicine, University of Monastir, Monastir, Tunisia

²Epidemiology and Preventive Medicine, Fattouma Bourguiba Hospital, Monastir, Tunisia

³Research Laboratory, Technology and Medical Imaging, University of Monastir, Monastir, Tunisia

⁴Internal Medicine, Fattouma Bourguiba Hospital, Monastir, Tunisia

Contact: manel-ben-fredj@hotmail.fr

Background:

The SARS-CoV-2 outbreak in 2020 caused a highly transmissible disease with a significant impact on the elderly. Understanding viral clearance duration of COVID-19 is important to tailor prevention strategies to this vulnerable