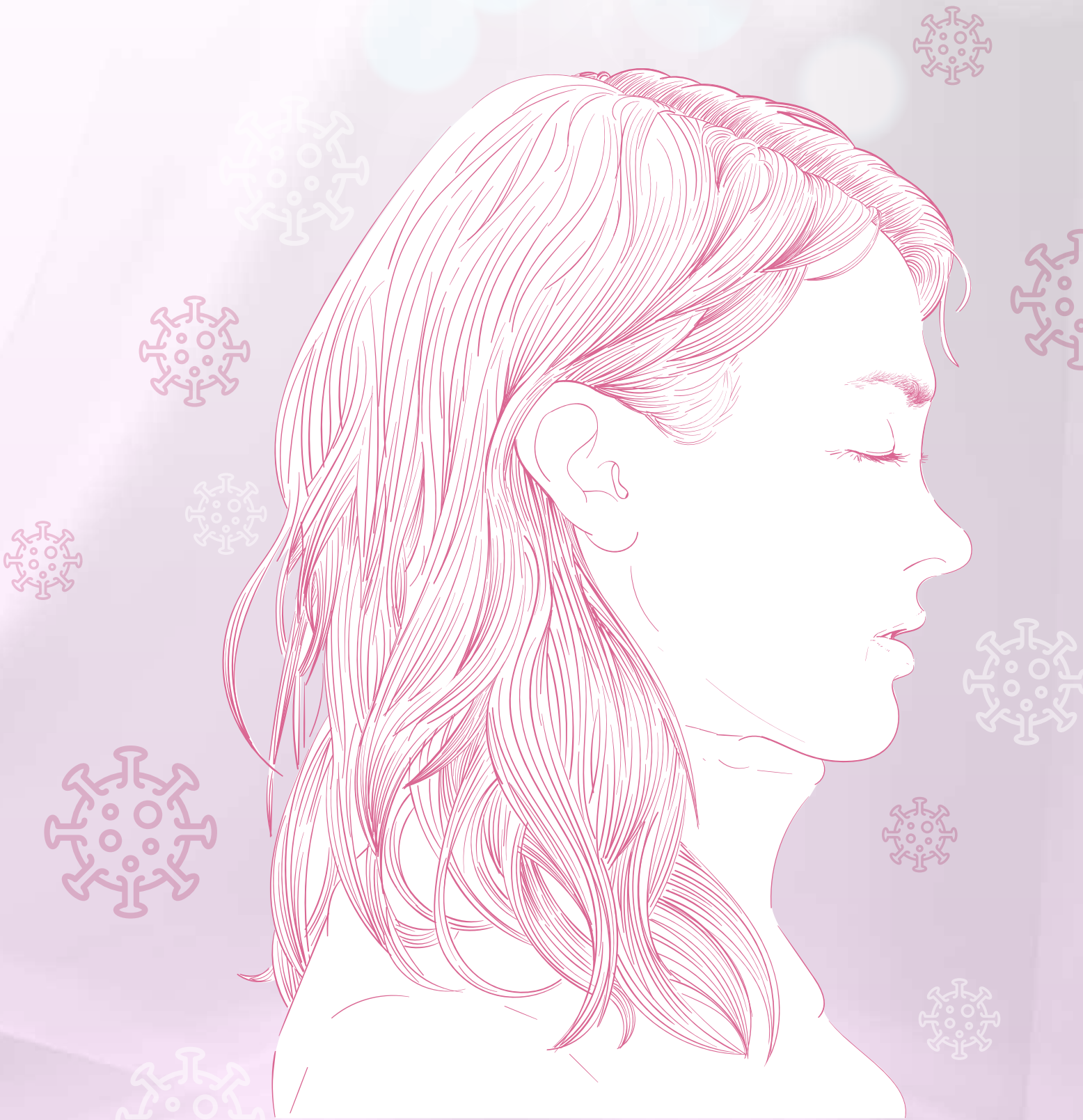


Hair Loss and COVID-19: The correlation exists!



Telogen effluvium - A consequence of **COVID-19** infection

Hair loss is highly prevalent among COVID-19 patients



30%

According to 94th SIDEMAST Congress discussion, 30% COVID-19 patients suffer from hair loss.¹

90%

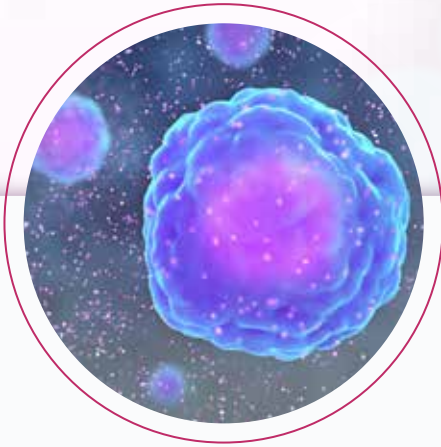
Cases have hair loss after 2 or 3 months of healing, mainly in the form of acute telogen effluvium (TE).¹



Wambier C et al. in a letter to the editor, reported clinically significant androgenetic alopecia in all the Indian males hospitalized with severe COVID-19.²

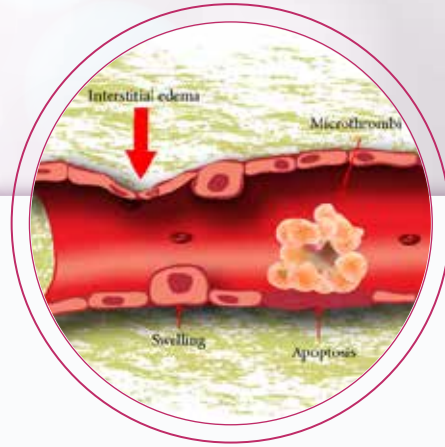


Possible mediators of TE in **COVID-19** patients



Inflammation storm

Higher levels of proinflammatory cytokines may correlate to a higher risk of TE in COVID-19 patients.³



Microthrombi formation

The coagulation cascade is activated in response to COVID-19 infection.

This leads to concentration of anticoagulant proteins (decreased production and increased consumption).

These factors lead to microthrombi formation which in turn may occlude hair follicle blood supply.³

Telogen effluvium in COVID-19 patient: Clinical evidences⁴

Aim

Moreno-Arrones OM et al. in a letter to the editor, assessed the association between acute TE and SARS-CoV-2 infection



Results

About 89.7% of patients with acute TE had a confirmed diagnosis of prior SARS-CoV-2 infection.

In 72.8% cases the acute TE was active four weeks after the diagnosis.

History of fever was associated ($p < 0.04$) with an increased hair shedding (Sinclair score of 5 or 6).



Symptomatic SARS-CoV-2 infection is a risk factor for the development of acute TE.

Telogen effluvium: A post COVID-19 infection complication³

In a case series, researchers described the presentation of patients diagnosed with TE attributed to COVID-19 infection. The findings of the study revealed that:

The mean age of the patients was **48.5 years old**. The vast majority (90%) were female

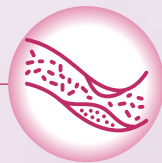
On average, the **hair shedding began 50 days** after the first symptom of COVID-19 infection

Summary

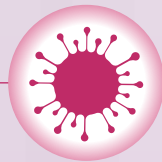
A high prevalence of hair loss is observed in COVID-19 patients



Inflammation storm and microthrombi formation are the proposed mediators for the development of TE among COVID-19 patients



Symptomatic SARS-CoV-2 infection is a risk factor for the development of acute TE.



On average, the hair shedding began 50 days after the first symptom of COVID-19 infection.

References

1. Rinaldi F, Trink A, Giuliani G et al. Italian Survey for the Evaluation of the Effects of Coronavirus Disease 2019 (COVID-19) Pandemic on Alopecia Areata Recurrence. *Dermatol Ther (Heidelb)*. 2021;11(2):339-345.
2. Wambier CG, Vaño-Galván S, McCoy J et al. Androgenetic alopecia in COVID-19: Compared to age-matched epidemiologic studies and hospital outcomes with or without the Gabrin sign. *J Am Acad Dermatol*. 2020;83(6):e453-e454.
3. Olds H, Liu J, Luk K et al. Telogen effluvium associated with COVID-19 infection. *Dermatol Ther*. 2021;34(2):e14761.
4. Moreno-Arrones OM, Lobato-Berezo A, Gomez-Zubiaur A et al. SARS-CoV-2-induced telogen effluvium: a multicentric study. *J Eur Acad Dermatol Venereol*. 2021;35(3):e181-e183.