

Resource Sheet #17 June 2022

COVID-19 and Telogen Effluvium

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The COVID-19 or SARS-CoV-2 pandemic has had devastating impacts on the world since its arrival in late 2019. Since then, there have been over 70 million cases and nearly 900,000 deaths in the United States. Many of those who have contracted COVID and recovered from the disease have experienced sequelae from the condition, including telogen effluvium. Telogen effluvium is a condition defined by temporary hair loss resulting from a form of shock to the body. This shock could be a result of stress, starvation, illnesses, medications, etc. In the case of COVID-19, there have been reported cases of excessive hair loss within months after being infected.

To understand telogen effluvium, one must understand the cycle of hair growth. There are three stages of hair growth: anagen, catagen, telogen. The anagen phase consists of the active hair growth phase. Depending on the type of hair—hair on the head, eyebrows, face, etc.—there are different lengths of the anagen phase. However, it is the longest phase of hair growth, and at any given point in time, 90% of the hairs on your head are in the anagen phase. The hair on your head has an anagen phase of 3-7 years, while the hairs on your arms have an active growth phase of about 30-45 days. This is followed by the catagen phase which is a transition period where the growing hair detaches from the follicle, and the hair follicle shrinks. It lasts about two weeks long. The last phase is the telogen phase which is the resting phase of the hair cycle which lasts three months. The follicle is initially dormant, and the existing hair does not get longer during this time. It reactivates during this stage, and new hair begins the growth phase underneath the skin. At the end of the telogen phase, exogen or shedding occurs, and the growing hair beneath the skin emerges.



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COVID-19 infection provides enough shock to the body to trigger many hair follicles in the anagen and catagen phases to acutely enter the telogen phase and ultimately shed. It has been shown that many inflammatory processes and cytokines are present in those with severe cases of COVID-19, which could understandably trigger hair loss, which has been the case with many COVID patients. Those that have recovered from the virus and went to dermatologists to treat their shedding have received positive pull tests which indicate active hair loss, specifically telogen effluvium. Along with the psychosocial and economic stressors of falling ill to the virus and the pandemic, this could exacerbate massive hair loss in individuals. Hair loss can serve as a detriment to the self-esteem of those who have endured the virus and are trying to heal and recover fully from its effects.

COVID-19 has been a part of the world's reality for nearly two years now and likely will continue to be a viral infection seen throughout the world. It has reshaped people's everyday lives and society as a whole. It is important to make patients aware of all of the possible short and long-term effects that may present themselves after SARS-CoV-2 infection. In order to accomplish that, additional studies should be conducted to understand the connection between COVID-19 and telogen effluvium.

References

Centers for Disease Control and Prevention. (n.d.). *Covid Data Tracker Weekly Review*. Centers for Disease Control and Prevention. Retrieved November 9, 2021, from https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html.

Mieczkowska K, Deutsch A, Borok J, et al. Telogen effluvium: a sequela of COVID-19. *Int J Dermatol*. 2021;60(1):122-124. doi:10.1111/ijd.15313

Mounsey AL, Reed SW. Diagnosing and treating hair loss. Am Fam Physician. 2009 Aug 15;80(4):356-62. PMID: 19678603.

Sharquie, K.E., Jabbar, R.I. COVID-19 infection is a major cause of acute telogen effluvium. *Ir J Med Sci* (2021). https://doi.org/10.1007/s11845-021-02754-5

Telogen effluvium. Telogen effluvium (hair shedding) | DermNet NZ. (n.d.). Retrieved November 9, 2021, from https://dermnetnz.org/topics/telogen-effluvium.

WebMD. (2010, March 1). Science of hair: Hair growth cycle & how hair works. WebMD. Retrieved November 9, 2021, from https://www.webmd.com/skin-problems-and-treatments/hair-loss/science-hair.



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