

### **RESEARCH LETTER**

# Increase in Google Trends Regarding Telogen Effluvium Due To COVID-19

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#### ABSTRACT

**Objective:** The purpose of this study was to assess the public interest in the United States of telogen effluvium before and after the COVID-19 pandemic in order to investigate the best therapeutic interventions for dermatologists in the future.

**Methods:** We performed Google Trends<sup>™</sup> search for "COVID hair loss", "telogen effluvium" and "hair loss" between 5/1/20 and 8/16/20.

**Conclusion:** All three terms have increased in popularity for search terms since mid-March and were the most prevalent in the states that experienced the earliest increase in number of coronavirus cases.

### INTRODUCTION

A long-term sequela of COVID-19 that has garnered attention in both the medical literature and the lay press is telogen effluvium (TE). The incidence of TE in patients recovering from COVID-19 is approximately 27%, and it is more common in women than men.<sup>1</sup> TE has been cited as an adverse effect from both viral infection and stressful conditions, such as job loss from the pandemic. However, it has been difficult to confirm if TE is due to COVID infection itself since not everyone was tested properly. Because many dermatology offices have closed during the pandemic, patients concerned about their hair loss are turning to online resources to learn more about their condition.<sup>2</sup> To determine if there is an increased public interest in TE. we

investigated the number of people conducting online searches for TE secondary to COVID-19.

### METHODS

Google Trends reflects search interest in various topics.<sup>3</sup> Using Google Trends, we analyzed the patterns of Google search queries with the search terms "COVID hair loss", "telogen effluvium" and "hair loss". The search timeline was set from 5/1/20 to 8/16/20. A Google Trends score ranges from zero to one hundred. A score of one hundred is considered the date when the search term was used at peak frequency. We also used Google Trends to ascertain where in the United States these search terms most used were

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**Figure 1**: The change in popularity of "COVID hair loss", "Telogen Effluvium" and "Hair Loss" in Google Trends<sup>™</sup> before and after COVID-19 pandemic in the USA from 5/1/19-8/10/20.

### RESULTS

In the United States there has been an increase in all three search terms since mid-March (Figure 1), and all three search terms are continuing to rise. Comparing the number of searches made at the same time period one year prior (5/1/19 to 8/16/19), use of the search term "hair loss" increased by 11% and use of the term "telogen effluvium" increased 14%. This provides indirect evidence that the incidence of TE is rising.

### DISCUSSION

The largest number of searches for the terms "COVID hair loss", "hair loss" and "telogen effluvium" corresponded to those states that were the earliest to experience sudden increases in the number of COVID-

**Table 1.** Google Trends Score and Average COVID-19-Positive Rate per 100,000

State	Google Trends Score*	Average COVID-19 Rate per 100,000*
New York	100	1576.7
District of Columbia	86	1385.1
Nevada	81	747.8
New Jersey	79	1878.6
Maine	79	216.9

\* Date range 5/1/2020 to 8/16/2020

19 cases within their borders.<sup>4</sup> New York and New Jersey topped the list both in terms of Google Trend searches and in COVID-19 infection rates per 100,000 (Table 1).<sup>5</sup> TE secondary to COVID-19 may be on the rise. In our own New York safety-net hospital, there was a 400% increase in TE cases compared to the year prior.<sup>6</sup> This report highlights that many patients are seeking answers and reassurance as seen in our March 2021 Volume 5 Issue 2

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own dermatology clinic. As clinics and offices reopen, dermatologists should expect increased numbers of TE cases, and they should prepare themselves to educate and treat these patients.

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#### **References:**

- Turkmen, D, Altunisik, N, Sener, S, et al. Evaluation of the effects of COVID-19 pandemic on hair diseases through a web-based questionnaire. *Dermatol Ther.* 2020 June 28;el3923 <u>https://doi.org/10.1111/dth.13923</u>
- Rivetti, N. and Barruscotti, S. Management of telogen effluvium during the COVID-19 emergency: Psychological implications. *Dermatol Ther.* 2020 May 22;e13923. doi:10.1111/dth.13648
- Effenberger, M., Kronbichler, A., Shin, J. et al. Association of the COVID-19 pandemic with Internet Search Volumes: A Google Trends<sup>™</sup> Analysis. *Int J Infect Dis.* 2020 Apr 17; 202095, 192–197. https://doi.org/10.1016/j.ijid.2020.04.033
- Oster, Alexandra M, et al. "Trends in Number and Distribution of COVID-19 Hotspot Counties -United States, March 8–July 15, 2020." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 20 Aug. 2020, www.cdc.gov/mmwr/volumes/69/wr/mm6933e2.h tm.
- CDC COVID Data Tracker. (n.d.). Retrieved January 12, 2021, from https://covid.cdc.gov/covid-datatracker/#trends\_dailytrendscases
- Cline, A, Kazemi, A, Moy, J, et al. Surge in the Incidence of Telogen Effluvium in Minority Predominant Communities Heavily Impacted by COVID-19. J Am Acad Dermatol. 2020 Oct 5.

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