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## Letters Habit cough is a cause of chronic cough in adults

Chronic cough is horribly unpleasant. Coughing frequency in those with chronic cough can be hundreds or even thousands of times per day during all waking hours. Quality of life is substantially decreased in those with this disorder. More than 40% of adults with chronic cough seen at specialty cough centers have no identified cause or effective treatment and are defined as idiopathic or refractory.<sup>1,2</sup> Children with chronic cough without a cause generally have a functional cough best known as habit cough (other terms used for this disorder include tic cough, psychogenic cough, and somatic cough disorder).<sup>3</sup> Habit cough has not generally been recognized in adults.

Peter Dicpinigaitis, cough specialist and editor of the journal *Lung*, acknowledged that psychogenic cough is well documented in children (for which he references "The habit cough syndrome and its variations [Lung 2012;190:45]). He then went on to say that "after evaluation of 1000 patients at our Cough Center, we have yet to make a diagnosis of psychogenic cough."<sup>4</sup> In fact, reports of psychogenic cough in adults have been limited to occasional case reports.<sup>5,6</sup>

In contrast, 20 adults self-reported to us that they experienced cessation of their chronic cough from viewing a recording of a video teleconference (https://youtu.be/jnQUvD8Qdj0). That video showed cessation of severe chronic cough in a 12-year-old girl receiving suggestion therapy, a simple behavioral technique, that 90 parents had similarly reported their children with habit cough stopped coughing from watching it.<sup>3</sup> The video had been placed on the web by the girl's father in February 2019. The 20 adults reporting that they stopped their chronic cough after viewing the video all had a repetitive dry cough throughout the day that was absent once asleep—the same clinical characteristics of habit cough reported in children.<sup>3</sup> We have previously reported that children with habit cough who viewed the video experienced cessation of the cough just as it occurred with direct contact. We referred to this as suggestion therapy by proxy.<sup>7</sup>

The 20 adults who self-reported cessation of their chronic cough included 11 women and 9 men (Table 1). The median age for women was 48 years with a range of 24 to 70 years old. The median age for men was 27 years with a range of 21 to 60 years old. The duration of cough for women averaged 39 months (median) with a range of 1 to

Table 1

Adults Who Confirmed Cessation of Chronic Cough by Watching the Online Video of Suggestion Therapy<sup>a</sup>

Contact initials	Contact date (MM/DD/YYYY)	Location	Sex	Age (y)	Cough duration (mo)
WX	3/23/2019	Canada	F	68	72
NY	6/9/2019	Minnesota	F	58	>12
JT	9/5/2019	Canada	М	27	36
AK	12/13/2019	Nepal	М	26	60
RT	1/15/20	Philippines	М	60	180
RT	7/14/2020	Singapore	F	24	9
HD	8/4/2020	Iowa	F	62	120
GP	9/16/2020	Illinois	М	23	120
KM	9/21/2020	Nebraska	F	41	60
TA	10/17/2020	India	М	21	5
SR	10/28/2020	California	F	44	17
GA	11//4/20	Minnesota	М	30	24
SB	11/28/2020	Florida	М	25	4
AD	12/1/2020	Texas	М	53	240
DB	12/2/2021	Hungary	М	29	4
JH	12/3/2021	Florida	F	41	75
GT	8/27/2022	New York	F	31	3
AL	8/29/2022	California	F	70	68
NP	11/14/2022	Maryland	F	60	<1
DB	11/24/2022	Australia	F	52	240

Abbreviations: F, female; M, male.

<sup>a</sup>These adults indicated to us through email that they were able to stop their chronic cough by watching an online video of suggestion therapy, which resulted in the cessation of chronic cough in a 12-year-old girl. Permission for use of anonymized patient data for research was obtained from all contacts.

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240 months. Men had a median duration of 48 months for their cough with a range of 4 to 240 months. Whereas some children also had durations of cough of more than 1 year, the median duration of habit cough for children was 4 months.

Although functional cough has not been generally recognized in adults, a 1685 publication described an adult woman with "a violent dry cough following her day and night unless she was fallen asleep."<sup>8</sup> Habitual cough that persisted after the original illness resolved, has been described in medical literature since 1694.<sup>9</sup> An 1886 publication described the same type of persisting cough following an initial illness as "...a habit cough—a reflex effect persisting after the cause is gone...or an acquired habit."<sup>10</sup> These descriptions are consistent with the characteristics of habit cough in both children and the 20 adults that were self-identified to us.

It is highly likely that there are adults with similar conditions who never contacted us. Therefore, it seems prudent for those at referral cough centers to identify these adults with chronic cough in which the clinical course is consistent with habit cough. This would include adults having chronic cough without an identified cause that is repetitive, occurring daily, is nonproductive, and is absent when asleep.

The importance of this report is that it shows that some adults with chronic cough have the same clinical characteristics as children with habit cough and relate to a video showing effective suggestion therapy A limitation of this report is the lack of a randomly assigned treatment of suggestion therapy that stopped the cough in these 20 adults. Our data suggest that adults with chronic cough without a cause, who have the clinical characteristics of a daily repetitive nonproductive cough that is absent once asleep, should be identified as potentially having habit cough. A sample of such patients then could be randomly assigned to suggestion therapy or an appropriate placebo. Miles Weinberger, MD<sup>a,b</sup> Dennis Buettner<sup>C</sup> <sup>a</sup> Rady Children's Hospital Pulmonary Division University of California San Diego San Diego, California <sup>b</sup> University of Iowa Iowa City, Iowa <sup>c</sup> Habit Cough Association Severna Park, Maryland miles-weinberger@uiowa.edu

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