

Beauty

'Uncombable Hair Syndrome' Is Real — and Scientists Have Made a Big Discovery



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Photo: Getty Images

It's easy to think you can't deal with your hair on certain days, but some people have a condition that actually makes their hair impossible to comb. It's called "uncombable hair syndrome," and it leaves children with completely tangled hair. You can see what it

looks like here.

While plenty of kids get knots and tangles in their hair, children who suffer from uncombable hair syndrome (also known as "spun glass hair syndrome") have extremely frizzy, dry, and typically light blond hair with a noticeable shine that is untamable. Luckily, the symptoms get better with time and, as children get older, their hair can be more easily styled.

Now researchers at the Universities of Bonn and Toulouse have figured out *why* uncombable hair syndrome occurs. The study, which was published in the *American Journal of Human Genetics*, discovered that there are mutations in three genes that cause the condition.

The changed genes are identified as PADI3, TGM3, and TCHH. PADI3 and TGM3 provide instructions for enzymes, which make up hair, while TCHH carries an important protein for the hair shaft. When hair is healthy, TCHH proteins join together with keratin, which makes the shape and structure of your hair. PADI3 helps the keratin stick to TCHH, and TGM3 makes the actual link that brings it all together.

But, in sufferers of uncombable hair syndrome, mutations occur in all three of these genes, leaving people with unruly hair.

The condition is rare — study co-author Dr. Regina Betz, a specialist in rare hereditary hair disorders at the Institute for Human Genetics at the University of Bonn, tells Yahoo Beauty that only 100 cases have been documented worldwide. However, she thinks it's more common than that. "We guess there are many more cases that either do not visit a doctor or are just unreported," she says.

Study co-author Dr. Fitnat Buket Basmanav agrees. “Individuals who suffer from uncombable hair syndrome do not always seek medical help as it is not a debilitating condition and can rather be experienced as a cosmetic problem,” she tells Yahoo Beauty.

Dr. Gary Goldenberg, medical director of the Dermatology Faculty Practice at the Icahn School of Medicine at Mount Sinai, agrees that the condition is rare, but tells Yahoo Beauty he’s seen a few cases over the past 10 years. “It’s hard to treat this condition,” he says. However, he recommends that people try using leave-in conditioners, conditioning hair masks, and frizz-easing products.

There may be no need to find a “cure” for uncombable hair syndrome, since Betz points out that hair improves with age, especially as a child becomes a teenager. However, Basmanav says the new discovery may help pave the way for therapeutic treatments for the condition, as well as products to help people with unruly hair.