## "Uncombable hair syndrome" linked to rare gene mutations

The "uncombable hair syndrome," which is usually present only in childhood, results in a tangled mess of frizzy hair that leaves the afflicted looking like they're being perpetually shocked by static electricity...There have only been around 100 cases reported in the medical literature,...[b]ut now researchers have discovered its underlying genetic cause.

Researchers haven't paid much attention to the syndrome, but Regina Betz from the University of Bonn managed to find 11 children with the syndrome and sequenced their DNA, working with an international team of colleagues. After analyzing their genomes, her team identified three common mutations that were correlated with the phenomenon. They published their findings ... in the *American Journal of Human Genetics*.

The three genes are responsible for interrelated aspects of the process that gives hair its structure. One encodes for a protein that binds to keratin, a substance integral to our hair, nails and skin, and the other two produce enzymes that affect how keratin binds together in our hair. If any of these three are thrown off, our hair won't grow properly, resulting in the wild tangles that characterize uncombable hair syndrome.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: Genetic Basis of 'Uncombable Hair Syndrome' Discovered