

Understanding the Hair Growth Process

Hojin Park*

Department of Dermatology, Tehran University of Medical Sciences, Tehran, Iran

DESCRIPTION

The hair growth cycle is a complex and dynamic process that occurs in multiple phases, resulting in the continuous renewal of hair follicles and the growth of new hair. Understanding this cycle is essential for comprehending the factors that influence hair growth, hair loss, and potential treatments. The hair growth cycle consists of three distinct phases: anagen, catagen, and telogen. Each phase plays a vital role in maintaining the health and appearance of the hair.

The first phase, anagen, is the active growth phase of the hair follicle. It typically lasts between two to six years and determines the length of the hair. During this stage, cells in the hair follicle rapidly divide, and the hair shaft grows continuously. The rate of hair growth during the anagen phase is approximately half an inch per month. On the scalp, around 85% to 90% of the hair follicles are in the anagen phase at any given time.

The next phase is the catagen phase, also known as the transitional phase. It is a short period lasting for about two to three weeks. During this time, the hair follicle shrinks and detaches from the blood supply, signaling the end of active growth. The hair follicle enters a state of regression, and the hair shaft stops growing. Only about 1% to 3% of the hair follicles are in the catagen phase at any given time.

The final phase is the telogen phase, also called the resting phase. It lasts for approximately two to four months. During this stage, the hair follicle remains dormant, and the old hair is pushed out by the new hair that is starting to grow beneath it. Around 10% to 15% of the hair follicles are in the telogen phase at a given time. Shedding of hair during this phase is a normal process, and individuals can lose around 50 to 100 hairs per day.

After the telogen phase, the hair follicle re-enters the anagen phase, and the cycle starts anew. However, it's important to note that not all hair follicles follow the same cycle simultaneously.

Each hair follicle operates independently and may be in different phases at any given time. This staggering of the hair growth cycle is what allows us to maintain a continuous coverage of hair on the scalp.

Numerous factors can influence the duration and quality of each phase in the hair growth cycle. These include genetics, hormonal changes, age, health conditions, medications, and environmental factors. For example, hormones like androgens can influence the hair growth cycle, which is why some individuals may experience hair loss or changes in hair growth patterns during puberty, pregnancy, or menopause. Understanding the hair growth cycle is crucial in the development of treatments for hair loss.

Many hair loss treatments target specific phases of the cycle to stimulate hair regrowth. For instance, medications like minoxidil and finasteride can extend the anagen phase, promoting hair growth and preventing further hair loss. Other treatments, such as hair transplant surgery, aim to transplant hair follicles from areas with active hair growth (typically the back of the scalp) to areas of thinning or balding. While the hair growth cycle is a natural and continuous process, disruptions or imbalances can lead to hair loss. Conditions such as alopecia areata, telogen effluvium, and pattern baldness can interfere with the normal functioning of the hair follicles and cause abnormal hair shedding or a decrease in hair growth. In such cases, seeking medical advice from a dermatologist or hair specialist is recommended to identify the underlying causes and explore appropriate treatment options. In conclusion, the hair growth cycle is a complex and dynamic process that consists of three distinct phases: anagen, catagen, and telogen. Each phase contributes to the continuous renewal of hair follicles and the growth of new hair. Various factors can influence the duration and quality of each phase, ultimately affecting hair growth patterns. Understanding the hair growth cycle is essential for comprehending hair loss, developing effective treatments, and maintaining healthy and vibrant hair.

Correspondence to: Hojin Park, Tehran University of Medical Sciences, Tehran, Iran, E-mail: Parkhojin37@gmail.com

Received: 23-May-2023, Manuscript No. HTT-23-25126; **Editor assigned:** 26-May-2023, Pre-QC No: HTT-23-25126 (PQ); **Reviewed:** 12-Jun-2023, QC No. HTT-23-25126; **Revised:** 19-Jun-2023, Manuscript No: HTT-23-25126 (R); **Published:** 26-Jun-2023; DOI: 10.35248/2167-0951.23.13.215

Citation: Park H (2023) Understanding the Hair Growth Process. Hair Ther Transplant. 13:215.

Copyright: © 2023 Park H. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.