# DOES THE NEW HAIR START GROWING IMMEDIATELY AFTER EVULSION

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All the grey hairs in the scalp of 10 young females were pulled out on the same day, and 3-5 months later the lengths of the regrowing grey hairs were measured. Presuming that the hair grows at a rate of 1-1.5 cm per month, the widely varying lengths of the regrowing hairs in each case indicated that all these hair follicles do not burst into the anagen phase immediately after evulsion.

Key words: Hair, Regrowth after evulsion.

It is generally believed that if a hair is pulled out of its follicle, a new hair starts regrowing from the same hair follicle almost immediately irrespective of the phase of hair cycle in which that follicle was when the hair was pulled out.<sup>1-4</sup> During the course of our studies on the treatment of premature grey hairs,<sup>5, 6</sup> it became possible to test this dictum, and interestingly, we obtained very different results.

#### Materials and Methods

In patients having a limited number of premature grey hairs, we would pull out all the grey hairs on a single day and count them. After a gap of 3-5 months, we would once again survey the scalp of the patient, to see and count as to how many of the evulsed grey hairs have regrown as grey hairs. Such hairs were expected to be grey from one end to the other, and the length would be less than the maximum length that can form during the interval between the evulsion and the subsequent survey.<sup>5</sup> It was presumed that the scalp hairs grow at an approximate rate of 1-1.5 cm per month.<sup>7</sup>

For the purpose of our present study, in addition to counting the number (percentage) of grey hairs regrowing as grey hairs, we also

Table I. Lengths of the regrowing hairs evulsed at the same time.

Number of the patient	Age in years	Number of days after evulsion	Number of hairs regrowing as grey hairs having the length in mm between											Total number of
			10- 19	20- 29	30- 39	40- 49	50- 59	60- 69	70- 79	80- 89	90- 99	100- 109	110- 119	hairs
I	12	92	3	7	3	1	1		5	_	_		1	21
2	20	165	3	2	11	3	4	4	15	8	7	1	_	58
3	23	175	_	3.	9	6	1	1	2	2		_	_	24
4	20	192	3	_	3	1	2	_	1	3	_	5	3	21
5	21	141	1		1	_	1	1		_			_	4
6	13	119	14	16	3	19	46	8	_	_	1	_		107
7	23	175		1	6	3	_	3	6	_	1	_		20
8	18	118	11	10	1	3	6				_	_	_	31
9	17	147	1	3	4	5	1	4	3	1	1	_	_	23
10	27	126	_		1	7	21	5	2		_	_	_	36

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measured the length of each of the regrown grey hair.

#### Results

Ten female patients between the ages of 12 and 27 years were included in this study. The lengths of the regrowing hairs are shown in table I. There were wide variations in each of the patients studied.

#### Comments

If all the evulsed hairs were to start their next anagen phase immediately after the evulsion, it was expected that all the regrowing hairs would have almost the same length, because they were all evulsed on the same day. The wide variations in the lengths of the regrowing hairs indicate that all the follicles do not burst into the anagen phase immediately after evulsion of the hair, and even when they do, they do not do so at the same time. Rather, formation of the new hair starts after a variable gap of time. A similar indication was available in our previous study as well.<sup>6</sup> The only other explanation for the varying lengths of regrowing hairs can be that

the rate of growth of different hair follicles is different. This seems to be less likely.

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