

Comparison Comb Study of Three Leading Combs: A Secondary Data Analysis



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Background

Fine tooth combs are commonly used as part of a head lice treatment regime. Head lice eggs and nits are firmly attached to the hair shaft, making them difficult to remove.

Schools in the U.S. are moving toward live lice only exclusion policies. Therefore, parental and school personnel interest in nit removal is decreasing.

Failure to remove viable eggs may result in re-infestation.

The visual presence of eggs or nits may be seen as a stigmatizing characteristic.

Purpose

The purpose of this study was to compare three leading nit combs (Terminator®, Licemeister® and Rid®) by evaluating their overall effectiveness in removing head lice and their eggs/nits.



Method

The efficacy of 3 fine tooth combs was evaluated. The hair of 100 participants (ages 3 to 50 years) was divided into two sections sagittally.

The terminator comb was randomly assigned to one half of the hair and one of the other combs was randomly assigned to the second half of the hair.

For each side of the head, the assigned comb was used to comb through the hair from root to tip for 20 strokes. The head lice and eggs/nits from the combings were counted and compared.

Results

Assessment of the hair and scalp revealed the visual presence of nits or eggs in 100% of the participants.

Combed percentages were: 61.0% with 1-100 nits/eggs, 22.7% with 101-200 nits/eggs, 8.2% with 201-300 nits/eggs and 7.2% with 301-550 nits/eggs.

Age Group	Frequency
Ages 1-5	7 (7.2%)
Ages 6-10	41 (42.2%)
Ages 11-14	31 (31.9%)
Ages 15-18	10 (10.3%)
Ages 19-30	0
Ages 31 & older	8 (8.2%)
Total	97

All three combs proved effective in removing head lice with no statistically significant difference between the effectiveness of the 3 combs.

The Terminator® comb was most effective in removing eggs/nits, followed by the Licemeister® and the Rid® combs.

Comparison of 3 Nit Combs

Nit Removal Comparison: Terminator® vs Lice Meister® Combs			
	N	Mean	Std. Dev.
Terminator®	48	113.69	107.53
Lice Meister®	48	54.10	54.10

$t = 5.495, p = .000$

Nit Removal Comparison: Terminator® vs Rid® Combs			
	N	Mean	Std. Dev.
Terminator®	49	116.59	120.02
Rid®	49	33.63	48.37

$t = 6.480, p = .000$

Conclusion

Overall the combs were equally effective in removing head lice. The Terminator® comb was significantly more effective in removing eggs and nits when compared to the Licemeister® and Rid® combs.

Further research is needed to determine the influence of factors such as egg/nit load, hair texture, hair length factors on comb efficacy

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