Mini-Review

The Old and the New in Hair Care: How the hair care market reinvents itself by using old concepts as a foundation to create temporary trends or to solidify already established concepts?

Cristal Bastos 1, Ademir Carvalho Leite Junior 2, *

1 Cristal Clínica Capilar, Vitória, Espírito Santo, ES, Brazil.
2 Centro Aperfeiçoamento Educacional e Científico - CAECI Eduacional, São Paulo, SP, Brazil.

* Correspondence: ademirjr@ademirjr.com.br.

Abstract

Introduction: The history of hair care begins along with the history of civilizations. Cosmetics were found in burial chambers in Egypt, and there are also the first reports of the use of hair shaving for hygiene reasons, especially by priests. Taking care of your hair, especially scalp conditions and problems associated with hair loss, over the centuries is something that involves countless approaches, some of which are strange and curious. Highlights include the ash from burnt frogs, bee ash with oil, dog urine, goat manure with oil, among many others. Over time, potions, tonics and drinks for medicinal purposes evolved. This article presents a comparison between the inspiring ideas that came from the transition from the 19th to the 20th century with those that emerged from the transition from the 20th to the 21st century.

Material and Methods: The method employed for the preparation of this article was a literature review and research on products and advertisements from the past to carry out a comparison between the methods used to treat hair in two historical moments.

Results and Discussions: When comparing products and equipment from two different historical moments, separated by approximately one hundred years, we can see the evolution of hair care, scientific advancement, and the inspiration of many current treatments in concepts from the past.

Keywords: Cosmetics; Vacuum; Laser; Hair loss; Scalp.

1. Introduction

Advertisements for hair products in old newspapers and magazines are a significant source of understanding how hair care treatments were conceived and executed. Since ancient times, marketing strategies for hair products have always made promises that go beyond what can be achieved through clinical treatments, leading people who experience such issues to make mistakes as they rely on fallacies created to sell products.

On the other hand, when analyzing these advertisements, it is evident that much of what was proposed for hair treatments in the 19th and 20th centuries served as a foundation and generated ideas for what we see today. Perhaps not with the same presentation and appeal, but in terms of concepts, as if the past inspired the new. In this manuscript, we present some
ideas and concepts from the past that are present in products and equipment used in contemporary times [1-5].

2. Helmets for Hair Treatments and Vacuum-Based Systems

Hair treatment helmets have been around since the 1920s. The Evans Vacuum Co. from the USA, a company always linked to the development of products using suction, such as vacuum cleaners, and still active today, developed the Evans Vacuum Cap (the company's name at the time was Evans Vacuum Cap Co.). It was a helmet model that used vacuum mechanisms to promote hair recovery. The Modern Vacuum Cap Co. in Denver, Colorado, also advertised a similar product for treating hair loss during the same period. Their advertisements had a very similar argument to the Evans Vacuum Cap Co. The Xervac Treatments by The Crosley Radio Corporation, also produced in the USA, followed the same principle as the vacuum systems mentioned above [6].

In 1923, the Thermocap by Allied Merke Institute was launched. The proposal of this helmet was to generate heat, thereby increasing local blood flow. It was a different approach to achieving what vacuum equipment also aimed for [6]. Nowadays, helmet-shaped devices are found for treatments that use low-power laser and/or red LED light emissions to promote hair growth. The ergonomic design and ease of use favor this equipment format. A variation of these helmets are caps, which, like helmets, have scattered points of red light on their inner surface to cover a large area of the scalp. Some current examples of helmets and caps include the Igrow by Igrow Hair Growth System (21 lasers + 30 LEDs – 25 minutes – every other day), iRestore by iRestore Hair Growth System (21 lasers + 30 LEDs – 25 minutes – every other day), Theradome (80 lasers – 20 minutes – 2 times a week), a helmet composed only of laser emitters, and products from the Capellux company, the Capellux cap (198 LEDs – 12 minutes per day), and the i9 line, the Capellux i9 (for home use – 204 LEDs – 7 minutes – daily use), and the i9 Professional (for clinic use – 204 LEDs – 15 minutes – 2 to 3 times a week), both of which have a helmet format (Figure 1).

The vacuum systems used in the past, also in the form of helmets, have evolved to incorporate negative pressure devices in the form of small cups. Similar to Eastern cupping devices, the equipment that creates a vacuum between the handpiece and the scalp skin is mounted on platforms with single-function (vacuum only) or multifunctional platforms that can combine other treatment methods such as high-frequency and clusters with lasers or LEDs. Some domestic companies offer these devices, including Ibramed, Fismatex, HTM, and Esthetic.

3. Electric Brushes

Devices for stimulating hair growth in the form of brushes date back to the 1880s. The Dr. Scott’s Electric Hairbrush was a massaging brush device (vibration massage) designed to stimulate the scalp and promote hair recovery. According to the literature, this product remained on the market for a maximum of 20 years, as electric brush advertisements disappeared around the year 1900. Companies currently working in the field of light stimulation with red light laser (the same used in helmets and caps) initially launched their devices in the form of brushes. Similar to Dr. Scott’s electric brushes, laser brushes should be used with their bristles gliding smoothly and slowly over the scalp (Figure 2). The idea is that the bristles should part the hair to facilitate the penetration of light emitted by the laser emitters within the brush body.

Recently, brushes devices like those from the company HairMax, one of the pioneers in launching low-power laser-emitting equipment for home use, can be found with 9 and 12 points of light emission (Figure 2). The recommended usage time for these devices is 12 minutes every other day. In recent years, the HairMax company has developed home devices in the form of bands (like headbands) with a high number of light emission points and rapid energy delivery to the skin (HairMax Laser Band 41 and HairMax Laser Band 82). These devices are notable for their speedy delivery of energy by the laser emitters, allowing for quick coverage of treatment areas. Treating the top of a head in a patient with a tendency for male or female pattern baldness, for example, takes approximately 90 seconds with the 82-emitter device.
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**Figure 1.** Helmet devices for hair and scalp treatments.

<table>
<thead>
<tr>
<th>HELMETS DEVICES</th>
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<tbody>
<tr>
<td>Old</td>
<td>New</td>
</tr>
<tr>
<td>Vacuum Cap - The Modern Vacuum Cap Co.</td>
<td>Igrow - Hair Growth System</td>
</tr>
<tr>
<td>Vacuum Cap - Evans Vacuum Cap Co.</td>
<td>IRestore - IRestore Laser</td>
</tr>
<tr>
<td>XERVAC - The Crosley Co.</td>
<td>Capellux 19 - Capellux</td>
</tr>
</tbody>
</table>

**Figure 2.** Brushes devices for hair growth.

<table>
<thead>
<tr>
<th>HAIR BRUSHES DEVICES</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Old</td>
<td>New</td>
</tr>
<tr>
<td>Dr. Scott’s Electric Hair Brush (massage)</td>
<td>HairMax Laser Brush (low-level laser therapy)</td>
</tr>
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**4. Refreshing Sensation as a Mechanism to Combat Baldness**

There is already a study that proves that the use of peppermint essential oil improves cases of androgenetic alopecia. However, in the early 20th century, with the limited knowledge of the etiology and pathophysiology of baldness, the speculated causes for the development of the problem were purely speculative. Today, we know that dandruff and seborrheic dermatitis play a role in this process as co-factors. This is because they alter the local microbiome and promote changes in the skin that can exacerbate hair loss. Pain, sensitivity, and itching are common symptoms in these cases. Seborrhea is also a result of the action of dihydrotestosterone on the sebaceous glands, the same hormone related to the hair miniaturization process in baldness.

It’s interesting to note that even though there wasn’t adequate understanding to justify why agents that promote a refreshing sensation, such as menthol and peppermint essential oil, lead to hair improvement, the advertising of that time was based on intriguing and curious arguments. One of them was justifying that Native American Indians did not go bald because they did not wear hats. For years, hats have been considered a cause of hair loss, either because they generate heat or because the part of the hat that comes into contact with the scalp, encircling it, was said to reduce blood circulation to the top of the head. There were several tonics that promised to cure baldness and dandruff, as well as improve hair health. Among them were tonics like Lucky Hair, CraniTonic (Cranitonic Hair Food Co.), Harlene (Edwards’ "Harlene" Co.), Barry’s Tricopherus, and Hall’s Vegetable Sicilian Hair Renewer. They all had plant extracts and agents that promoted a refreshing sensation, including derivatives of mint [8] (Figure 3).

**Figure 3.** Products with refreshing ingredients for hair and scalp treatments.

<table>
<thead>
<tr>
<th>Refreshing Sensation (shampoos and tonics)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Old</td>
<td>New</td>
</tr>
<tr>
<td>Lucky Hair, CraniTonic - Cranitonic Hair Food Co.</td>
<td>Fortesse Shampoo – Tricho-RES</td>
</tr>
<tr>
<td>Harlene Tonic - Edwards’ &quot;Harlene&quot; Co.</td>
<td>Cristal Shampoo – Cristal Cosméticos</td>
</tr>
<tr>
<td>Barry’s Tricopherus</td>
<td>Energizing Seasonal Superactive - Davines</td>
</tr>
</tbody>
</table>
3. Conclusion

The advertisements presented here demonstrate how the products and equipment we use for hair care draw from the past. It's as if knowledge and technology have undergone a more scientific reinterpretation of certain models to apply them to the present day. It's true that in the past, there wasn't sufficient evidence-based knowledge to adequately understand the reasons why people lost their hair. At most, they had an understanding that "lack of local circulation" and dandruff were the causes. Helmets have evolved and returned with different technology and purposes.

Lasers are increasingly recognized as effective methods for hair recovery. The use of vacuum, although lacking in literature, may somehow be helpful. And the use of active ingredients found in botanical extracts and essential oils is becoming more common, as nature provides us with countless components in plants that serve as a true pharmacopoeia, and research on them continues to increase in scientific journals.

What remains evident is that the new builds upon the old, giving it a more informed and modern reinterpretation for hair care. Scientific knowledge serves as a ladder for new products to enter the market, becoming increasingly effective and yielding more consistent results.

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References